

**TENDER REFERENCE NO.: KK/388/2025/ESTETRIPASH**

**MINISTRY OF HEALTH  
NEGARA BRUNEI DARUSSALAM**

**REPLACEMENT OF WATER-COOLED CHILLER, CHILLED  
WATER PUMP AND COOLING TOWER AT M&E PLANT  
BUILDING, RAJA ISTERI PENGIRAN ANAK SALEHA  
HOSPITAL**

**TENDER FEES : \$100.00**

**RECEIPT NO. :**

**CLOSING DATE : ON TUESDAY, 20/01/2026**

**TIME : 2.00 PM**

**FOA :**

**THE CHAIRMAN  
MINI TENDER BOARD, TENDER BOX  
GROUND FLOOR, MINISTRY OF HEALTH  
COMMONWEALTH DRIVE  
BANDAR SERI BEGAWAN BB3910  
NEGARA BRUNEI DARUSSALAM**

**(CLUSTERING)**

**MINISTRY OF HEALTH  
NEGARA BRUNEI DARUSSALAM**

**REPLACEMENT OF WATER-COOLED  
CHILLER, CHILLED WATER PUMP AND  
COOLING TOWER AT M&E PLANT  
BUILDING, RAJA ISTERI PENGIRAN  
ANAK SALEHA HOSPITAL**

**ESTATE MAINTENANCE SECTION  
HOSPITAL RAJA ISTERI PENGIRAN ANAK SALEHA**

## TABLE OF CONTENTS

|           |  |    |
|-----------|--|----|
| SECTION 1 | INTRODUCTION TO TENDERERS                                | 3  |
|           | APPENDIX 1: ACKNOWLEDGEMENT OF INVITATION TO TENDER FORM | 17 |
|           | APPENDIX 2: CLARIFICATION NOTICE FORM                    | 18 |
|           | APPENDIX 3: SITE VISIT FORM                              | 19 |
|           | APPENDIX 4: TENDER SUBMISSION REQUIREMENTS               | 20 |
|           |  |    |
| SECTION 2 | SPECIFICATIONS   | 21 |
|           |  |    |
| SECTION 3 | FORMS TO BE USED   | 35 |
|           | SCHEDULE 1 – TENDER FORM                                 | 36 |
|           | SCHEDULE 2 – INFORMATION SUMMARY                         | 43 |
|           | SCHEDULE 3 – SUB-CONTRACTS                               | 44 |
|           | SCHEDULE 4 – COMPANY’S BACKGROUND                        | 45 |
|           | SCHEDULE 5 – REFERENCES                                  | 46 |
|           | SCHEDULE 6 – LETTER OF DECLARATION                       | 47 |
|           | SCHEDULE 7 – SCHEDULE OF MANUFACTURER AND SUPPLIER       | 54 |
|           | SCHEDULE 7 – SPECIFICATION CHECKLIST                     | 56 |
|           |  |    |
| SECTION 4 | CONTRACT   | 57 |

## SECTION 1

### INSTRUCTION TO TENDERERS

#### 1 INTRODUCTION

- 1.1 The purpose of this Invitation to Tender is to invite Tenders for **REPLACEMENT OF WATER-COOLED CHILLER, CHILLED WATER PUMP AND COOLING TOWER AT M&E PLANT BUILDING, RAJA ISTERI PENGIRAN ANAK SALEHA HOSPITAL.**

#### 2 INTERPRETATIONS

- 2.1 As used in these Instruction To Tenderers, the following terms shall have the following meanings, except where the context otherwise requires:

"**Contract**" means the agreement(s) to be entered into between the Government and the successful Tenderer in the form of Contract(s) set out in **Section 4** of this; Invitation to Tender or as otherwise agreed between the successful Tenderer and the Government;

"**Government**" means the Government of His Majesty the Sultan and Yang DiPertuan of Brunei Darussalam represented by the Ministry of Health, Brunei Darussalam.

"**Government Project Officer**" means the Project Co-ordinator or such other person as the Government may from time to time determine;

"**Services**" means the services to be provided by the Tenderer as described in **Section 2** of this Invitation To Tender;

"**Intellectual Property Rights**" means any rights in respect of or in connection with any confidential information, copyright, patents, design rights, reports, drawings, specification, or eligible layout rights and includes any right to apply for registration of such intellectual property rights;

"**Invitation To Tender**" means this Invitation To Tender, including the Instructions To Tenderers and all of its Sections, inviting Tenderers to offer to meet the Government's requirements by submitting a Tender in accordance with the requirements of this Invitation To Tender;

"**Specification**" means the specifications and requirements of the Services as described in **Section 2** of this Invitation To Tender;

"**Tender**" means the Tenderer's response to this Invitation To Tender;

"**Tender Closing Date**" means the date and time specified for the submission of the Tender;

"**Tenderer**" means a person, partnership or any other body (whether corporate or otherwise) who submits a Tender in accordance with this Invitation To Tender;

"**Validity Period**" means the time period during which the Government may accept a Tender.

- 2.2 Subject to any inconsistency of subject or context, the following rules of construction shall be used in the interpretation of these Instructions To Tenderers.

2.2.1 A cross reference to a clause number is a reference to a clause of these Instructions to Tenderers and includes all of its' sub clauses;

2.2.2 Words importing the singular include the plural (and vice versa) and words importing a gender include any other gender;

2.2.3 In the event of any inconsistency between these Instructions To Tenderers and the conditions of the Contract as contained in this Invitation To Tender, the latter shall prevail.

### **3 ELIGIBILITY**

- 3.1 Only companies registered with the Ministry of Development and/or Ministry of Health, with **Class III and/or above, with category M01** are eligible to participate in this Invitation to Tender.
- 3.2 Tenderers are required to submit their Company's Certificate of Incorporation or Firm's Certificate of Registration, as applicable, with their Tender.

### **4 CONFIDENTIALITY**

- 4.1 This Invitation To Tender constitutes confidential and proprietary information of the Government and shall not, except with the consent in writing of the Government, be disclosed in whole or in part to any third party, or to any employees of the Tenderer, other than those who have a need to know such information for the purpose of responding to this Invitation To Tender, and shall not be duplicated or used by the Tenderer for any other purpose than to evaluate this Invitation To Tender.
- 4.2 The Government may require any unsuccessful Tenderer to return any specification, plans, patterns, samples, or instructions issued by the Government.
- 4.3 The Tenderer's attention is also drawn to the Official Secrets Act (Chapter 153) which relates to the safeguarding of official information.

### **5 FORM OF CONTRACT**

- 5.1 The successful Tenderer shall be required to enter into a contract with the Government in substantially the form enclosed at **Section 4** in this Invitation to Tender, or as otherwise agreed between the successful Tenderer and the Government.
- 5.2 The final decision to appoint a successful Tenderer or not will rest with the Government in its sole and absolute discretion. The Government will not be bound to accept the provision of any products and/or services tendered by any Tenderer unless and until the execution of the Contract by the successful Tenderer.

### **6 SUBMISSION OF TENDER**

- 6.1 All Tenders shall be submitted in a form which satisfies the following requirements:
- 6.1.1 the Tender must be in English;
  - 6.1.2 each page must be numbered consecutively;
  - 6.1.3 whenever possible, the Tender submitted should not exceed A4 paper size; and
  - 6.1.4 the Tender must be bound in a form which does not facilitate replacement of pages (i.e. loose leaf binding is not acceptable).
- 6.2 The Tender must include an address where notices, request, waiver, consent or approval required to be sent by the Government, can be directed to.
- 6.3 The Tender, including the Tender Form and all other accompanying documents are to be put in an envelope, sealed and must be submitted in **two (2) sets** made up of one (1) original and one (1) duplicate. All sets shall be bound and clearly labelled as ORIGINAL, DUPLICATE etc. respectively. All Tenders must be addressed to:

**Chairman,  
Mini Tender Board,  
Ministry of Health,  
Jalan Menteri Besar,  
Commonwealth Drive,  
Bandar Seri Begawan BB3910,  
Negara Brunei Darussalam**

6.4 The envelope containing the Tender:

(a) shall not bear the name or address of the Tenderer, and

(b) shall have on its **top left-hand**

(i) the Tender number;

(ii) and the words

**“DO NOT OPEN BEFORE 2.00 p.m., On Tuesday, 20<sup>TH</sup> JANUARY 2026”** and

(iii) the closing date and time of the Tender.

(c) shall bear the following description of the project, namely:

**“REPLACEMENT OF WATER-COOLED CHILLER, CHILLED WATER PUMP AND COOLING TOWER AT M&E PLANT BUILDING, RAJA ISTERI PENGIRAN ANAK SALEHA HOSPITAL - KK/388/2025/ESTETRIPASH”**

6.5 For the ORIGINAL:

a. All pages of the Tender must bear the official seal or rubber stamp of the Tenderer and initialled by the Tenderer's authorized representative.

b. All price schedules must be typewritten, bear the official seal or rubber stamp of the Tenderer and signed by a duly authorized agent or officer of the Tenderer.

c. All corrections or cancellations will not be accepted unless such corrections or cancellations are initialed by the Tenderer.

d. All pages must be numbered.

6.6 All documents and materials must be submitted at the same time. Materials such as published articles, brochures and pamphlets submitted with the Tender must be stamped with the name of the Tenderer and securely packaged with the Tender.

6.7 Submission of Tender by telex, telegram or facsimile is **not** permitted.

## **7 VALIDITY PERIOD OF TENDER**

7.1 Each Tenderer shall for each Tender it submits, maintain a Validity Period of **six (6) months** from the Tender Closing Date. Any Tender expressed to be valid for a shorter period may, in the absolute discretion of the Government, be rejected.

7.2 Where the Government seeks an extension of the Validity Period, a request in writing will be forwarded to the Tenderer. The Tenderer shall be required to respond in writing to extend the Validity Period. Failure to respond will result in the Tender not being considered further.

## **8 AMENDMENT OR ADDITION TO THE INVITATION TO TENDER**

8.1 The Government reserves the right to issue amendments or additions to these Invitation To Tender at any time before the Tender Closing Date. Any such amendment shall be numbered, dated and issued by the Government Project Officer. Where the amendment is significant, the Government may at its discretion extend the Tender Closing date.

8.2 The Government will endeavour to notify all Tenderers in writing of any such amendments or additions by forwarding such amendments or additions to the Tenderers' address as advised by the Tenderer in the **Invitation To Tender Acknowledgment Form**. The said form shall be in

the format set out in **Appendix 1** to these Instructions to Tenderers. It is a condition of this Invitation To Tender that any amendment or addition forwarded by the Government to the Tenderer in accordance with this clause shall be deemed to have been duly given if this information is forwarded to such address.

## **9 WITHDRAWAL OF TENDER**

- 9.1 No Tender may be withdrawn after the Tender Closing Date. Any Tenderer who attempts to do so may, in addition to any remedy that the Government may have against it, be liable to be debarred from future Government tender.

## **10 TENDER PRICE**

- 10.1 The Tenderer shall quote in Brunei Dollars in its Tender the all-inclusive price (i.e. CIF price, inclusive of all customs duties and taxes payable whether in or outside Brunei Darussalam) of the Services described in these Invitation To Tender. Tendered prices shall be firm and fixed and remain valid for acceptance for a period of six (6) months from the Tender Closing Date and during such extension of the period as may afterwards separately be agreed in writing by the Tenderer at the request of the Government. The tendered prices shall be submitted in accordance with the format set out in **Section 3** to this Invitation to Tender.

## **11 SUFFICIENCY OF TENDER PRICE**

- 11.1 The Tenderer shall be deemed to have satisfied itself before tendering as to the correctness and sufficiency of its Tender for the provision of the Services.

## **12 CLARIFICATION PRIOR TO TENDER CLOSING DATE**

- 12.1 A Tenderer seeking clarification of any of the requirements of this Invitation To Tender prior to the Tender Closing Date may only do so in writing in the format set out in Appendix 2 to these Instructions To Tenderers and shall be sent by the Tenderer by mail or facsimile to:

*Head Of Section  
Estate Maintenance Section  
Raja Isteri Pengiran Anak Saleha Hospital  
Negara Brunei Darussalam  
Telephone no: 2242424 ext 2222/8637/8638*

- 12.2 The Government will endeavour to provide any clarification as soon as possible. Each and every request for clarification (without any details as to who they are from), together with the relevant clarification, shall be distributed to all Tenderers.

- 12.3 The Government will NOT accept any request for clarification that is submitted within seven (7) days prior to the Tender Closing Date.

## **13 OWNERSHIP OF TENDER DOCUMENTS**

- 13.1 By submitting a Tender, the Tenderer:

13.1.1 licenses the Government to reproduce for its own purposes whatsoever, the whole or any portion of the Tender notwithstanding any copyright or other Intellectual Property Right that may subsist in those documents; and

13.1.2 acknowledges that the Tender and all other documentation submitted with it shall not be returned to the Tenderer.

- 13.2 The Government acknowledges that, subject to Clause 13.1 above, the Intellectual Property Rights in the Tender documentation remains vested in the Tenderer concerned.

## **14 TENDER CLOSING DATE**

14.1 All Tenders shall be lodged on or before the Tender Closing Date in accordance with these Instructions To Tenderers.

## **15 LATE TENDERS**

15.1 A Tender lodged or received by the Government after the Tender Closing Date shall be disqualified.

## **16 TENDERERS TO INFORM THEMSELVES**

16.1 By responding to this Invitation To Tender, a Tenderer will be deemed to have acknowledged and agreed that it has done so on the basis that it has:

16.1.1 the necessary skills, knowledge, and experience to provide the Services sought;

16.1.2 in preparing its Tender:

a. fully examined this Invitation To Tender (including all documents the Invitation To Tender refers to) and any other information made available by the Government to Tenderers for the purpose of this Invitation To Tender; and

b. made its own reasonable enquiries (including inspections) to fully, inform itself of all the risks, contingencies and other circumstances which may impact on the Tender and the proper performance of the Tenderer's obligations under the Contract; and

c. has not relied upon any warranty or representation (whether oral or in writing or by conduct) made on behalf of the Government except where such warranty or representation is contained in this Invitation To Tender or made through the processes specified by these Instructions To Tenderers; and

16.1.3 satisfied itself as to the accuracy and sufficiency of the Tender (including the tendered prices) to achieve the due and proper performance and completion of the Tenderer's obligations under the Contract.

## **17 SUB-CONTRACTORS**

17.1 To assist the Government in its evaluation of any Tender, where a Tenderer proposes to sub-contract any of its obligations under the Contract, the Tenderer shall state the name and address of each sub-contractor and the extent of the work to be carried out by the sub-contractor. In addition, the Tenderer shall provide information about each sub-contractor.

## **18 ERRORS IN TENDERS**

18.1 Tenderers are advised to study this Invitation To Tender very carefully before finalising their Tenders for submission. The onus is on the Tenderer to ensure that an accurate and complete Tender is submitted.

18.2 The Government may exclude from consideration, any Tender in which prices are not clearly and legibly stated.

18.3 Where the Tender is on a lump sum basis and an error has been made in the priced bill of quantities to arrive at the tendered lump sum, the Tenderer shall without undue delay make all such alterations in and to the priced bill of quantities as the Government considers necessary for such purpose.

- 18.4 If the Tenderer fails to make the alterations as directed by the Government and/or fails to do so within the time set by the Government, the Tender shall be deemed to have been withdrawn by the Tenderer.
- 18.5 Where the prices tendered are on a schedule of rates basis and an error has been made in the calculation or summation of the prices, the Tenderer shall be bound by the rates tendered and the Contract sum/total stated in the Tender shall, subject to the agreement of the Tenderer, be altered by the Government to reflect the correct calculation or summation of the prices.
- 18.6 If the Tenderer fails or refuses to agree to the alteration of the Contract sum/total, the Tender shall be deemed to have been withdrawn by the Tenderer.
- 18.7 If a Tenderer becomes aware of any other discrepancy, error or omission in its Tender not referred to or covered in Clauses 18.3 and 18.5 above and wishes to lodge a correction or additional information, it can *only* do so if;
- 18.7.1 the correction or additional information is provided to the Government without undue delay and is done prior to the Tender closing date; and
- 18.7.2 the correction or additional information is provided to the Government in writing and is initialled by the Tenderer.
- 18.8 In all the above circumstances, any correction or addition shall not be used to alter the Tender in any material particular or so as to change the Tender in a material way. Any omission or addition which is deemed by the Government to alter the original Tender in a material particular, the Tender shall be rejected without any liability whatsoever on the part of the Government.

## **19 CLARIFICATION OF TENDERS BY GOVERNMENT**

- 19.1 At any stage during the evaluation phase, the Government may:
- 19.1.1 request clarification of any Tender in respect of specific issues contained in that Tender; or
- 19.1.2 call for interviews with Tenderers; or
- 19.1.3 request Tenderers to provide additional information in writing; or
- 19.1.4 conduct a site inspection or a presentation of the Tenderer's facilities and equipment to clarify any part of the Tender and to examine the capabilities of such facilities and equipment. The Tenderer shall not unreasonably deny such request.
- 19.2 Where requested to clarify any matter contained in the Tender or to provide additional information or sample, Tenderers; shall provide such sample and/or clarification and/or additional information in writing at the time and place stipulated by the Government. Failure to comply with any such request may result in the Tender being excluded from further consideration.
- 19.3 In the event that any clarification, additional information, sample, presentation or site inspection is requested from a Tenderer by the Government, the Tenderer shall provide such clarification, additional information, sample, presentation or site inspection at no cost to the Government whatsoever.

## **20 CONDUCT OF TENDERER**

- 20.1 Any Tenderer who attempts or is found to have offered a bribe, gratuity, bonus, discount, or any sort of enticement to any employee of the Government shall have their Tender rejected by the Government.

## **21 CANVASSING**

21.1 Canvassing shall render the Tender invalid. In the event of any canvassing being discovered after the acceptance of the Tender, the Government shall be entitled to rescind the Contract.

## **22 EXPENSE OF TENDERER**

22.1 In submitting a tender, the Tenderer will be deemed to have acknowledged and agreed that it will bear all the expenses it incurs in preparing its Tender or negotiating the Contract and is not entitled to seek any compensation or reimbursement of those costs from the Government.

## **23 INVALID TENDERS**

23.1 Incomplete Tender submissions and/or Tender submissions received after the Tender Closing Date shall be invalid.

## **24 ACCEPTANCE OF TENDER**

24.1 The Government reserves the right not to accept the lowest priced or incomplete Tender or any Tender, and shall not be bound to assign any reason therefore.

24.2 When accepting the Tender, the Government may accept the whole or any part(s) of the Tender in which event, the Contract Price shall be adjusted in accordance with the schedule of prices set out in the Tender.

24.3 The successful Tenderer or Tenderers (as the case may be) shall be required to enter into a contract with the Government in substantially the form enclosed at Section 4 of this Invitation to Tender, or as otherwise agreed between the successful Tenderer and the Government. In the event that the Tenderer is a duly, authorised agent, the formal agreement is to be executed with the principal.

24.4 A Letter of Acceptance of Tender will be sent by registered post to the successful Tenderer's address as given in his Tender and shall be deemed to be received in due course by post.

24.5 Where the successful Tenderer's office is outside Brunei Darussalam, he shall also be informed by telex or fax, where possible.

## **25 COPYRIGHT**

25.1 The Government reserves to itself all copyrights in this Invitation To Tender.

## **26 PERFORMANCE BOND**

26.1 The successful Tenderer shall provide a Performance Bond in accordance with the Contract.

## **27 SUPPORTING DOCUMENTS**

27.1 The Tenderer shall furnish, as part of its Tender, the following and in the form of Schedules specified below:

27.1.1 **Schedule 1 - Tender Form**, in the format set out in **Section 3** in this Invitation To Tender;

27.1.2 **Schedule 2 - Information Summary**, containing information on Tenderer's profile and previous experience(s) in providing the services specified in this Invitation to Tender;

27.1.3 **Schedule 3 – Sub-Contracts**, as required under Clause 17 above;

27.1.4 **Schedule 4 - Company's Background**, containing information on the Tenderer's

background, scope of operations, financial standing, certified copy of its Certificate of Incorporation or Certificate of Registration (as the case may be);

27.1.5 **Schedule 5 - References**, containing a list of organizations or government agencies to whom the Tenderer has supplied/is supplying the goods and services specified in this Invitation To Tender;

27.1.6 **Schedule 6 - Letter of Declaration**, containing a declaration by the Tenderer that the Tenderer or any member of the Tenderer's family do not have any interest in other companies competing for the same tender.

27.1.7 **Schedule 7 – Statement of Compliance**, containing statement of compliance corresponding to all sections of Section 2 – Specifications

27.1.8 **Schedule 8 – List of Personnel**, containing list of registered personnel by the Tenderer containing information on the Personnel's qualification, experiences and certification for Mechanical and Electrical / HVAC engineer and other relevant personnel.

27.1.9 **Schedule 9 – Submittal and Documentation**, containing comprehensive checklist of submittal / documentation to be enclosed by the Tenderer with this Tender.

27.2 The Tenderer shall also provide details of any special conditions applicable to its Tender and any other information required by this Invitation To Tender.

## **28 COMPLIANCE WITH INSTRUCTIONS TO TENDERERS**

28.1 Tenders will be considered only if submitted according to the instructions in these Instructions To Tenderers. Non-compliance with any such instructions will render the Tender 'Non-Compliant' and possible rejection by the Government.

## **29 EVALUATION OF TENDER**

### **Evaluation Objective**

29.1 Tenderers must note that the Government will award the Contract to the Tenderer whose Tender is considered to be most advantageous to the Government. Therefore, whilst cost is an important consideration, it is only one of the criteria upon which each Tender will be evaluated. Price is considered in conjunction with conformance to the specifications and requirements contained in **Section 2** in this Invitation To Tender.

### **Evaluation Process**

29.2 The assessment of the Tenderer's response will be derived from the written Tender response, information obtained as a result of enquiries made with reference sites, the samples submitted and any presentations/demonstrations undertaken as part of the evaluation process.

### **Shortlisting**

29.3 At any time during any stage of the evaluation process the Government may undertake a shortlisting exercise and shortlist more than one Tenderer.

29.4 If the Government performs such a shortlisting exercise, then Government may exclude from further evaluation and consideration Tenders which are not included on the shortlist. The Government may at any time and in its sole discretion, include on the shortlist any Tender which was not initially included on the shortlist.

### **Enquiries of Referees and Others**

29.5 Tenderers should note that the Government may make enquiries of any person, company or

organisation to ascertain the suitability of the Tender and the Tenderer.

- 29.6 This may include, but is not limited to, the confirmation of any information provided in the Tender. Should the Government decide to approach a current or former customer of the Tenderer that has not been included in the list of references, the Government will notify the Tenderer of such action.
- 29.7 Information obtained pursuant to these enquiries an information supplied by referees and other persons may be taken into account by the Government when evaluating Tenders.

### **30 SITE VISIT**

- 30.1 A compulsory site visit session must be made by all Tenderer as a general requirement of this Tender prior to submission of tender in order to provide consistent advice and clarification to all parties at the same time. The venue, date and time of the session shall be arranged by the Tenderer with the Supervising Officer (S.O.) at any time before the closing date.
- 30.2 The Tenderer shall visit and examine the site, take necessary measurements, familiarize and shall satisfy himself and be deemed to have allowed for all costs or expenses taken all consideration in the nature of this contract and no extra cost will be paid in in respect thereof due to negligence in his tender price.
- 30.3 At the site visit session, the Government will endeavour to answer any questions from Tenderers in relation to this Tender. If the Government is unable to provide an answer to a question at the site visit session, it will endeavour to provide the answer as soon as possible after the session.
- 30.4 All Tenderers shall clarify with the Supervising Officer (s) prior to the submission of the Tender Document to ensure that the full scopes of works, specification and requirements are clearly and fully understood. If no request for clarification was received from the tenderer(s) before the tender's closing date, then it shall be deemed that all the tenderers has understood all the terms and conditions of this Tender.

**SITE VISIT FORM**

**TENDER REFERENCE NO: KK/ /2025/ESTETRIPASH**

**INVITATION TO TENDER FOR REPLACEMENT OF WATER-COOLED CHILLER, CHILLED WATER PUMP AND COOLING TOWER AT M&E PLANT BUILDING, RAJA ISTERI PENGIRAN ANAK SALEHA HOSPITAL**

**COMPANY NAME** : \_\_\_\_\_

**DATE OF SITE VISIT** : \_\_\_\_\_

I hereby on behalf of my Company has made a Site Visit to the work location on the date stated above and understand the work requirement(s) and all specification stated in this Tender document.

I (My Company) also agree not to make any additional claim to MOH should any accident(s) or damage(s) occur during the contract period.

**CONTRACTOR'S SIGNATURE**

\_\_\_\_\_

**NAME:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

|                      |
|----------------------|
|                      |
| <b>COMPANY STAMP</b> |

**FOR OFFICIAL USE ONLY**

**VERIFIED BY  
S.O./O.I.C.**

\_\_\_\_\_

**NAME:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

|                         |
|-------------------------|
|                         |
| <b>DEPARTMENT STAMP</b> |

The Contractor must fill in this form and obtain signature from the S.O./O.I.C. as verification for having visited the Site. Failing to do so will lead to **disqualification** from this Tender.

## TENDER SUBMISSION REQUIREMENT

TENDER REFERENCE NO: KK/ /2025/ESTETRIPASH**INVITATION TO TENDER FOR REPLACEMENT OF WATER-COOLED CHILLER, CHILLED WATER PUMP AND COOLING TOWER AT M&E PLANT BUILDING, RAJA ISTERI PENGIRAN ANAK SALEHA HOSPITAL****GENERAL CHECKLIST**

The Tenderer is required to fulfil all requirements stated in this section by submitting a **copy** of all relevant documents whichever applicable to this Tender, stamped and shall complete the checklist provided as a verification. **Incomplete submission can render the Tenderer's submission of Tender to be invalid** (Clause 3.1.3, Financial Regulation 2022).

## Description

1. Valid Builder's License/Contractor Registration Certificate/Supplier's Certificate approved by the Authority for Building Control and Construction Industry (ABCI), Ministry of Development.
2. List of company's worker with names as stated in the identity card/passport, identity card number, position and salary and local and foreign workers percentages.
3. Latest Certificate of Tax Compliance from the Revenue Division, Ministry of Finance and Economy.
4. Confirmation compliance to Employee Trust Act and Supplemental Contributory Pension Trust Order 2009 from Tabung Amanah Pekerja Act including stating employer account number and list of contributed employee.
5. Registry of Companies and Business Names approved via Corporate Registry System in One Common Portal.
6. Completing the Tender's Integrity Declaration Form.
7. Copy of company owner/Director identity card (front and back).
8. Company Registration License Form X, 16 & 17.

## SECTION 2

### SPECIFICATIONS FOR REPLACEMENT OF WATER-COOLED CHILLER, CHILLED WATER PUMP AND COOLING TOWER AT M&E PLANT BUILDING, RAJA ISTERI PENGIRAN ANAK SALEHA HOSPITAL

#### 1. GENERAL

- 1.1 The Tenderers are sought from suitably qualified contractors who wish to be considered for this Tender. The general scope of work of this Tender comprises of the following:
- a) Replacement of Water-cooled chiller unit no. 1, complete with all piping, valves, flexible connection, air vent, gauges, flow switch, insulation, and any other associated components necessary to complete functional of the System.
  - b) Replacement of Primary chilled water pump no. 1, complete with all piping, valves, flexible connection, gauges, flow switch, y-strainer, isolators, insulation, extension joint, and any other associated components necessary to complete functional of the System.
  - c) Replacement of Cooling tower no. 1, 2, and 3, complete with all piping, valves, and any other associated component necessary to complete functional of the System.
  - d) Chilled and Condensing Water Treatment System.
- 1.2 The duration of the **Replacement Work shall be Eight (8) months.**

#### 2 PRELIMINARIES

- 2.1 The Contractor is responsible in planning, arranging and mobilization of all machineries such as diesel generators, equipment, tools, transport, barrier, necessary warning sign and others necessary for the complete and proper execution of the works stated in this Tender to Site.
- 2.2 The Manufacturer/Supplier shall be responsible for the proper packing and labelling of the new Chiller, Pump, Cooling Tower and its associated parts for shipment and is safely shipped from destination until arrival on Site with adequate protection from shock and bump. In the event where damages to the Chiller, Pump, Cooling Tower or any of its associated parts occurred during shipping, the Supplier/Contractor shall rectify or obtain new parts as a result of negligence in material handling storage.
- 2.3 The Contractor shall prepare and submit Risk Assessment Method Statement (RAMS) and JHA (Job Hazard Analysis) to the S.O. for evaluation and approval prior to commencement of any works stated in this Tender.
- 2.4 The Contractor shall provide all barriers, signage, materials for hoarding and others where necessary to the work site. This shall include compliance to Infection Control Risk Assessment Guidelines.

#### 3 ACCESS TO HOSPITAL

- 3.1 The Contractor shall familiarize himself with the existing worksite condition, access, existing works and all existing services, cable runs, pipelines etc., the dimensions, levels, locations and particulars of existing works and services.
- 3.2 The Contractor should take note that the works will be carried out in an area, which is continuously operational and must take all necessary precautions to prevent damage to existing services such as water, electricity, cables including minimize noise and other services disruption.

- 3.3 The Contractor shall immediately notify to the S.O. any damages to the MOH assets found and if the damages occurred is due to negligence during the contract period, it shall be reinstated by the Contractor at no extra cost to MOH.

#### **4 MANPOWER**

- 4.1 The Contractor shall provide manpower with the necessary skills, knowledge, full time supervision of all his employees, personnel and provide Personal Protection Equipment (PPE) such as coverall (bearing the name of the Company), safety helmets, safety shoes and tools necessary for all workmen during the course of work for the proper execution and completion of the works in a safe manner. The Contractor is responsible for ensuring the workers assigned for the performance of the works are experienced and competent in their respective job or trade category.
- 4.2 S.O. reserve the right to request for replacement of worker if the worker is found to be incompetent, does not comply with the regulations practiced at the workplace, negligence, does not comply with instructions given by the S.O. or others where necessary.

#### **5 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

- 5.1 The Contractor shall at his/her its own expense, supply its personnel and sub-contractor's personnel, required in connection with the safe performance of the work, with adequate protective personal clothing and other protective equipment which shall be maintained in good condition or replaced and shall be worn on relevant occasions as indicated by notices, instructions and good practice.
- 5.2 The S.O. have the right to stop the work or does not allow entry to site if the PPE worn by the workers assigned is deemed unsatisfactory.

#### **6 INSURANCE**

- 6.1 The Contractor shall procure and maintain, and continue to extend the following insurances and shall remain effective throughout the contract period and any extension of time granted at his own expense:
- 1) Workmen Compensation.
  - 2) Public Liability.
  - 3) Fire.

#### **7 CONTRACT PRICE AND PAYMENTS**

- 7.1 The proposed Contract Sum shall be deemed to cover all costs, charges and expenses for labour, materials, consumables, tools, equipment, transport, documentation, taxes, duties, overheads and any other necessary items for the proper and complete execution of the works stated in this Tender. This proposed Contract Sum shall remain fixed and firm for the duration of this Contract.
- 7.2 The Contractor is eligible to submit Progress Claim at any time during the contract period. The Basis for the claims shall be based on the work completed during the preceding month. All claims shall be addressed to:

**Head of Section  
Estate Maintenance Section  
Raja Isteri Pengiran Anak Saleha Hospital  
Negara Brunei Darussalam**

- 7.3 The Contractor is required to attach the following documents to his payment claim:
1. Photographs (before and after / progress photograph).
  2. Job Report.
  3. Other relevant document and/or attachment requested by the S.O.

## **8 USE OF SITE**

- 8.1 The Contractor shall not use any of the sites for any purpose other than that of carrying out the scope of work in this Specification.
- 8.2 The Contractor shall, at all times, keep the sites clear and free from all surplus materials, rubbish, debris arising from the execution of the works and keep the sites in clean conditions.

## **9 SECURITY**

- 9.1 The Contractor shall provide to the Superintending Officer full details of all his personnel and vehicles requiring access to the site upon receiving Letter of Award by completing work permit provided by the Estate Maintenance Section.
- 9.2 Where security passes are issued to the Contractor's personnel, the Contractor is responsible for the proper use of the passes.
- 9.3 The Contractor shall ensure that the passes are immediately returned to the authorities when they are no longer required due to the employee not being engaged to work at the secured area, or if the employee has left the Contractor's employment.

## **10 HEALTH AND SAFETY PRECAUTIONS AGAINST FIRE, NOISE CONTROL, etc**

- 10.1 The Contractor shall provide all necessary measures to comply with all health and safety regulations and rules currently in place. The Contractor shall also comply with all orders and instructions given to him from time to time by the Superintending Officer with regards to health and safety of persons in the vicinity of any site, site regulations and the work in general.
- 10.2 The Contractor shall take all reasonable precautions to prevent loss or damage by fire, comply with existing fire regulations and all instructions given to him by the Superintending Officer with regards to fire precautions and prevention.
- 10.3 The Contractor shall also ensure that all measures are taken to control noise and dust levels produced during the contract period.
- 10.4 The Contractor shall ensure that all equipment is/are safe and operable prior to handing over to the Government.
- 10.5 The Contractor shall adhere to Infection Control Risk Assessment, Implementation and Monitoring Policy (ICRA).
- 10.6 The Contractor shall be responsible in preparing materials for hoarding such as plywood, plastic, tapes, rubber mat and all other materials necessary to meet the requirements of the ICRA policy and as per instructed by the Infection Prevention and Control Unit. All costs shall be deemed to be covered in this Contract.

## **11 WORKMANSHIP**

- 11.1 The S.O. have the right to request amendment or correction of work if it is not satisfactory in terms of quality, workmanship or according to instructions at the Contractor expense. Any job done which are not within the contract scope and done without S.O.'s approval shall not be claimed and will not be entertained due to negligence of contractor.

## **12 PROGRESS REPORT**

- 12.1 The Contractor shall prepare progress report and submit to S.O. every month to keep track the status of the work. The Contractor is also strongly advised to take photographs of work carried out during the contract period as evidence to be attached for progress payment claim. Photographs attached must be clear, properly arranged and labelled including description.

- 12.2 The Contractor shall also submit a final report upon completion consisting of all specification, material list, catalogue, relevant operating manuals, maintenance procedures, As-Built Drawings, routing of cables and spare part list complete with pricing, preventive maintenance checklist for the new equipment installed and others deemed necessary by the S.O.

### **13 EXTENSIONS OF TIME**

- 13.1 The S.O. may make a reasonable extension of time if the supply is delayed due to S.O.'s instructions or any other reasons which in the opinion of the S.O is beyond the control of the Contractor.
- 13.2 If the Contractor fails to supply any of the items within the Contract period (as in the Letter of Award or as revised according to any extension of time granted by the S.O.) the S.O. may cancel or reject the items supplied late or all items which cannot be used without compensation. The S.O. may obtain such items from other sources and all additional costs or expenses thereby incurred shall be deducted from any monies due or to become due to the Contractor under this contract or shall be recoverable as a liquidated demand in money.

### **14 VARIATIONS AND EXTRAS**

- 14.1 The Superintending Officer may at any time during the progress of the Works, by order in writing under his hand, make or cause to be made any variations from the original Drawing, and Specification by way of addition or omission or otherwise.

### **15 DEFECTIVE LIABILITY PERIOD**

- 15.1 The defective liability period (DLP) shall commence one (1) day after the date of practical completion where any defects, shrinkages or other faults, either of materials or workmanship, which may appear hereto or if none stated then within **twelve (12) months** due to materials and workmanship not in accordance with this Contract shall within reasonable time after receipt of the Superintending Officer's written instructions be made good by the Contractor and at his own cost.
- 15.2 If the Contractor fail to carry out any such instructions of the Superintending Officer, as by the proceeding sub clause provided, within such reasonable time as may be specified in the order, the materials or work so affected may, at the option of the Superintending Officer, be made good by him in such manner as he may think fit, in which case the cost thereby incurred shall be deducted from the sum remaining to be paid to the Contractor or failing such remainder it shall be recoverable as a liquidated demand in money.
- 15.3 If any defects be such that, in the opinion of the Superintending Officer, it shall be impracticable or inconvenient to remedy the same, he shall ascertain the diminution in the value of the Works due to the existence of such defect and deduct the amount of such diminution from the sum remaining to be paid to the Contractor or failing such remainder it shall be recoverable as liquidated demand in money.

### **16 RETENTION MONEY**

- 16.1 A retention money of **7.5%** of the contract sum shall be withheld by the Government and shall be released at the end of the Defective Liability Period. The amount shall be subjected to any adjustment made from any variation order.

### **17 SCHEDULE OF MANUFACTURERS AND SUPPLIERS**

- 17.1 The Tenderer shall complete Schedule 7 the specifications of the offered item he intends to propose. Brochures or catalogue of the offered items consisting of technical manufacture must be attached to show all equipment, specification, and dimension for proper assessment by the S.O. The Tenderer shall also attach any additional document consisting additional information for supporting his offer where necessary or when requested by the S.O. Contractor is strictly

not allowed to change material as listed in this schedule after submission of this Quotation unless it is deemed below the minimum requirement by S.O.

## **18 COMPREHENSIVE MAINTENANCES**

- 18.1 The Contractor shall perform comprehensive maintenance for a period of one (1) year, comprises of planned preventive maintenance, complete with spare parts for corrective maintenance at no additional cost to the Client. The Comprehensive Maintenance shall start one (1) day after the issuance of certificate of practical completion.

## **19. PARTICULAR CONDITIONS OF CONTRACT**

- 19.1 The Tenderer shall note that the replacement and refurbishment works are critical due to the nature of the Hospital environment. Contractor to ensure that the building will remain fully operational throughout the Contract, ensuring security, safety, technical expertise for phased execution, and managing shutdowns to minimize disruption to essential services. Tenderer must be aware of potential idle time and shutdown cost; therefore, project planning, risk assessment, and coordination are crucial to ensuring smooth project completion within schedule. **The Tenderer to submit the Work Program and Phase-specific risk assessment together with this tender document.**

- 19.2 The Tenderer shall ensure that all Item included as part of this tender to fully conform with the following standards: -

- 1) American National Standards Institute (ANSI) Safety Code for Mechanical Refrigeration and/or The Air-Conditioning, Heating, and Refrigeration Institute (AHRI), ANSI/AHRI 550/590;
- 2) American National Standards Institute (ANSI) Safety Code for Mechanical Refrigeration and/or American Society of Heating Refrigerating, Air-Conditioning Engineers (ASHRAE), ANSI/ASHRAE 15;
- 3) The Air-Conditioning, Heating, and Refrigeration Institute (AHRI), AHRI 575;
- 4) Other standards where relevant.

- 19.3 **All associated works are included but not limited to the following:**

### **1) CONSULTANT:**

- The Tenderer must engage a **Qualified Personnel (QP)**, registered under Board of Architect, Professional Engineer, and Quantity Surveyor (BAPEQS), and/or any other equivalent certification to **establish and provide documented evidence** that the proposed design of the System meets the relevant standard, compatibility, and efficient operation requirement in accordance to site condition, arrangement, and the nature of the hospital environment.
- The Tenderer shall submit together with this Tender, the specification and/or catalogues of the Item offered; the selection **Performance Chart and Letter of Undertaking** shall be enclosed together with this tender document. Any deviation from the specifications must be clearly stated in separate sheet.
- The Tenderer shall prepare and submit a detailed comprehensive **Civil & Structural, and Mechanical & Electrical assessment report** demonstrating complete technical compatibility and fully functional integration of the new Unit with the existing facility and site environment.
- All documentation relating to the above shall be **certified** by the Tenderer's appointed personnel and/or manufacturer of the proposed Item, and or relevant parties as applicable. Any disclaimer and non-compliance with the tender specification will not be acceptable.

**2) SHUTDOWN PROTOCOLS:**

- Due to the critical nature of the Hospital Environment, the Contractor is not permitted to completely shut down the HVAC system for the duration of this Contract. In the event, where shut down is necessary, the Contractor shall prepare and submit formal, written report detailing the necessity and scope of the shutdown together with the proposed temporary backup plan for critical areas with the anticipate duration to the S.O for approval. The quoted price shall include in the temporary backup plan.
- No shutdown exceeding 8 hours is allowed at any point. Any necessary shutdown must receive prior approval from the Client and representative. Work may need to be carried out during late hours, but no overtime payments will be paid and the contractor must account for this in their pricing and scheduling.

**3) PHASED EXECUTION OF WORKS:**

- The works must be carried out in phases to minimize disruption to the building's cooling and power supply requirements. **Phase-specific risk assessments** must be conducted, and any required after-hours or odd-hour work is included in the quoted price. No additional claims will be entertained for such arrangements. The Contractor must submit a detailed phasing plan for approval.
- Due to the spatial constraints of the existing plant room, specialized enabling works might be necessary to create clearance for the new unit. Any heavy machineries, demolition work, and removal of roof might be needed and the cost shall be inclusive in the quoted price.

**4) WATER-COOLED CHILLER/COOLING TOWER/PUMPS/ACMSB:**

- The Proposed Units shall fully conform with the specification detailed hereunder, any discrepancy or non-compliance shall be formally notified and attached together with this Tender. Failure to disclose such information will lead to disqualification and/or any additional costs shall be borne by the Tenderer.
- The Tenderer shall mandate factory acceptance test / run for the new unit, the Test Reports shall be submitted to S.O for approval including any relevant certification such as compliance with AHRI / ASHRAE / ANSI / Any other relevant certification.

**5) REPLACEMENT OF CHILLERS, CHILLED WATER PUMPS AND COOLING TOWERS:**

The Tenderer must full compliance and ensure all aligned to specificities.

- The Tenderer is responsible for incorporating any additional controls or switchgear necessary, at no extra cost, as these are considered to be included within the quoted prices.
- Foreseen challenges in replacing the aforementioned, while minimizing shutdowns, will require temporary arrangements to keep the system operational without interruption. All associated costs for these temporary measures will be borne by the Tenderer, with no additional claims entertained.
- There are 4 existing chillers, pumps, cooling tower and its associated components on site, where such temporary replacement / relocation / shutdown is needed, the Contractor must ensure that proper removal, disposal, and integration of the new unit with the existing system arrangement. A Site Survey / Site Visit must be conducted to assess the condition of the existing system and plan for their removal and integration. The Cost shall be inclusive in the quoted price.

**6) PROGRAMME SCHEDULE SUBMISSION:**

- The Contractor shall submit a detailed Programme Schedule for the replacement and upgrading works. This schedule must outline the phases of work from commencement to

completion, including testing and commissioning. All works must follow to ensuring efficient planning and execution.

- A detailed bar chart work programme and critical path network analysis within seven (7) days of taking possession of the site. Weekly progress reports must include updates on project milestones, delays, and any corrective actions. Photographic records should be submitted at monthly intervals to document project progress
- If at any point during execution phase it becomes necessary to alter the approved Programme Schedule, the Contractor must notify the Superintending Officer and submit a revised schedule for approval, ensuring that any proposed changes adhere to the initial baseline.

**7) PERSONNEL REQUIREMENT:**

- The Tenderer must complete the list of registered personnel with full details of their qualification, experience, as set out in **Section 3, Schedule 8 – List of Personnel**. The appointed team lead/engineer will be interviewed by the Superintending Officer (SO) to verify their technical expertise. If the appointed personnel are deemed inadequate, the Tenderer may be subject to disqualification. If at any point that the list of Personnel needs to be change, the Tenderer shall submit the new personnel detail for approval from the SO. The list of compulsory personnels are as follows:

- 1) Mechanical & Electrical Engineer / HVAC Engineer
- 2) On-Site Supervisor
- 3) Technician
- 4) Tradesman / Electrician
- 5) Safety Officer

**6) SAFETY STANDARDS:**

- The Tenderer must ensure that all works are performed to the **highest safety standards**, protecting both workers and other personnel affected by the project. All workers must be equipped with **appropriate safety gear** relevant to the specific tasks and areas and must receive proper instruction in its use. A Safety Officer registered under **SHENA** and/or **NEBOSH** holder shall be provided for the purpose of this project.

**7) WORK AFTER NORMAL OFFICE HOURS:**

- Should the Contractor perform work outside of office hours or during the public holiday. Permission to work must be obtain from the S.O.

**8) WARRANTIES:**

- The Tenderer shall provide full warranty, operational support, and comprehensive maintenance for the new Unit and its associated parts for a minimum of twelve (12) months, or the duration of the original manufacturer's warranty, whichever is longer. It shall be in accordance with the manufacturer's recommendation and/or S.O instruction.

**9) COMPREHENSIVE MAINTENANCE:**

- The Tenderer is responsible for the operation and routine preventive maintenance commencing **one (1) day** after the issuance of the Certificate of Practical Completion, including the DLP.

**10) MAINTENANCE TEAM REQUIREMENTS:**

- The Contractor shall maintain the newly installed equipment, performing comprehensive maintenance, consists of planned preventive maintenance and corrective maintenance on the System. The Contractor shall dispatch his workers to site to attend any breakdown

when instructed by the Superintending Officer in writing or telephone in any event deemed reasonably urgent, safety critical, and other unforeseen circumstances. A technical / service / breakdown report shall be submitted backed with evidence of the fault of breakdown found in the event together with the proposed rectification work, and any other relevant information requested by the Superintending Officer.

- The Tenderer must provide a competent maintenance crew for the ongoing works. This includes one (1) skilled and competent full-time Technician and one (1) skilled and competent full-time Tradesmen to operate the systems as indicated.
- Maintenance shall be carried out during Government working hours: 07.45 am – 12.15 pm & 01.30 pm – 04.30 pm.
- The Contractor shall be available even after office hours, Fridays, Sundays, and Public Holidays as directed by the S.O if necessary.
- The Tenderer shall also ensure that technical services shall be available twenty-four (24) hours a day for the convenience of the Government to provide assistance for any emergency service at no additional cost.
- Where necessary, the Superintending Officer reserves the right to shift the schedule maintenance date to alternative date/s, in conjunction with a VIP visit to any the sites with or without prior notice.

## 11) PENALTIES

1. The Contractor shall dispatch his workers to site to attend any breakdown when instructed by the Superintending Officer or his representative **within 1 hour (Response time)** after being notified in writing or telephone in any events deemed reasonably urgent, safety critical and any other unforeseen circumstances. A penalty of **Two Hundred Dollar (B\$200.00)** for each hour of delay shall be imposed or part thereof of the response time is exceeded.
2. If the Contractor;
  - a) Failure to perform preventive maintenance on the Chiller, Pump and Cooling Towers in accordance with the approved work schedule by the Superintending Officer, shall result in a liquidated damage of **One Hundred Dollar (B\$100.00)** for each day the scheduled maintenance is delayed. However, this charge may be waived if a valid justification is provided and accepted by the Superintending Officer. Alternatively, a request to reschedule the maintenance service may be submitted in advance, but it must receive prior written approval from the Superintending Officer.
  - b) The **Down Time** shall not exceed a minimum of **three (3) days** in order to keep the Chiller, Pump and Cooling Towers in good working condition in which failure to do so shall result in a liquidated damage of **One Hundred Dollar (B\$100.00) per day** to be imposed for each day exceeded.
  - c) In the event where the replacement parts must be ordered and a delay is to be expected, the Contractor must without delay notify the Superintending Officer of the proposed delivery and repair date in which the Superintending Officer may, at his discretion, approve or revise the proposed date. Failure to complete the corrective maintenance by the approved date will result in a liquidated damage of **One Hundred Dollar (B\$100.00) per day** to be imposed unless a valid justification is provided and accepted by the Superintending Officer.
3. In the event where Contractor has failed to attend any breakdown or request as per stated in **Clause 19) 1** of this Section, the S.O reserve the rights to instruct other Contractor (**hereinafter referred to as “Others”** to attend instead and all cost shall be borne by the Contractor).

**12) SPARE PARTS AVAILABILITY:**

- The Tenderer may be required to maintain a stock of essential spare parts on-site to ensure quick availability for repairs. Shall the down time to exceed 3 days after it being notified without any clarification from the Contractor, the Government has the right to issue penalties as per **Clause 11**.

**13) PLANT AND EQUIPMENT MAINTENANCE:**

- The Tenderer must maintain all plant, tools, and vehicles necessary for the proper execution and completion of works. Any temporary installations must be promptly removed upon project completion, and safety standards must be observed at all times.

**14) SITE CLEANLINESS & RUBBISH REMOVAL:**

- The Tenderer is responsible for maintaining a clean and organized worksite. Rubbish and debris must be cleared continuously, and upon completion, all temporary structures and equipment must be removed. Failure to clear the site will allow the Government to instruct other party to attend instead and all cost shall be borne by the Contractor.

**15) DISMANTLING & REMOVAL OF UNSERVICEABLE EQUIPMENT:**

- The Tenderer is required to dismantle and remove unserviceable air-conditioning and ventilation equipment, and all associated components. Mobile cranes may be necessary for large equipment removal, and all dismantled items must be properly disposed of or transported as directed by the Superintending Officer. Cost shall be inclusive of all necessary mobilization and demobilization of the Equipment.

**16) PROTECTION AND RESTORATION OF WORK AREAS:**

- All work areas must be adequately protected during the dismantling process to prevent damage to floors, walls, and other infrastructure. After the removal of old equipment, the Tenderer must restore / reinstate all affected areas to their original condition.

**17) COMPLIANCE WITH TECHNICAL SPECIFICATIONS:**

- The supply of equipment and associated materials must be of approved types and fully compliant with the technical specifications outlined in the tender. Failure to disclose any deviations or non-compliance will be solely the responsibility of the Tenderer, and any resulting financial losses or penalties shall be borne by the Tenderer.

**18) TESTING, CALIBRATION & COMMISSIONING:**

- Prior to Practical Completion, the Contractor shall run a comprehensive testing of the whole System, inclusive of water and air balancing, water testing and any other testing associated in the entire system. The Contractor shall submit the technical report including commissioning plan, performance benchmark (accordance with OEM selection data) to the superintending officer for approval including

**19) SUBMITTALS AND DOCUMENTATION:**

- The Tenderer must prepare and submit together with this tender a Composite Shop Drawing integrating the HVAC and Electrical systems. This drawing shall serve as the fully coordinated roadmap, clearly dictating the location and layout of the Chiller, Pump, Cooling tower, and its associated parts (Isolation Valve, Balancing Valve, etc.) connecting to the existing site arrangement.
- The Tenderer shall submit two (2) sets of the following manufacturer's documentation (hard and soft copy) to the Superintending Officer. It shall include of the following:

**WATER-COOLED CHILLER:**

|    |  |
|----|--|
| 1. | Equipment General Catalogue  |
| 2. | Operational Manual Book  |
| 3. | Maintenance Manual Book  |
| 4. | Complete Equipment Manual C/W Material and Replacement Part No. List.  |
| 5. | Assess Password/Code to Minimum Admin /Supervisors' Level, Required Associated Software Program to Access the Equipment at The Site to Access for Daily Routine Operation and Record Data. |

**PRIMARY CHILLED WATER PUMP:**

|    |   |
|----|---|
| 1. | Equipment General Catalogue   |
| 2. | Pump Maintenance Procedures   |
| 3. | Maintenance Manual Book   |
| 4. | Operational Manual Book   |
| 5. | Maintenance Manual  |
| 6. | Complete Equipment Manual C/W Material and Replacement Part No. List. |

**COOLING TOWERS:**

|    |  |
|----|--|
| 1. | Equipment General Catalogue  |
| 2. | Pump Maintenance Procedures  |
| 3. | Operational Manual Book  |
| 4. | Maintenance Manual Book  |
| 5. | Complete Equipment Manual C/W Material and Replacement Part No. List.    |
| 6. | Manufacture's Specialist to Witness Assembly and Test the Cooling Towers |

- The Tenderer shall also submit a Letter of Undertaking of commitment from the Manufacturer to provide technical support, knowledge sharing, and the manufacturer's compliance to the technical specification, warranty for the following major equipment/systems/ services; Water-cooled Chiller, Pump, and Cooling Towers.
- The Contractor shall provide a complete and thoroughly compiled report which shall include but not limited to the followings:
  - Material List
  - Relevant documentation and drawings
  - As-Built Drawings
  - Detailed system layout, piping layouts and schematics, cabling routing and indication of all installed devices and equipment
  - Reports and test results conducted
  - Testing and commissioning activities report
  - Comprehensive material list covering all components, equipment, and accessories supplied and installed
  - Catalogues, data sheets and manufacturer specifications for all materials and devices used
  - Operation and Maintenance (O&M) Manuals
  - Any additional documentation or reports deemed necessary by the Superintending Officer (S.O.)

All documents shall be submitted in binded, hard covered and/or equivalent hard copy (properly bound document) and soft copy (PDF format) for the S.O.'s review and approval prior to project handover. Failure to provide accurate As-Built Drawings and relevant documentation will delay the release of final payment.

- The contractor shall also supply and install aluminium-engraved, anti-corrosive tag identification (ID) and/or plate for water-cooled chiller, chilled water pump and cooling tower and/or others containing the following:
  - Commissioning Date
  - Purchase Order (P.O.) Number

- Serial Number (wherever applicable)
- Model and Manufacturer
- Any additional information required by the S.O.

All tags shall be installed in a visible, accessible location, securely fastened, and resistant to environmental conditions.

**20 SCOPE OF WORKS**

The works to be executed shall comprise of the following:

**20.1 WATER-COOLED CHILLER UNIT**

- (a) The Contractor shall terminate, dismantle, and remove existing Chiller and Supply with brand-new Water-Cooled Chiller unit of not less than **800TR** (ton of refrigerant) at **6.7°C/12.2°C** leaving and entering temperatures for cooler and **29.44°C/34.61°C** entering and leaving temperature for condenser with minimum flow rate of **121 l/s** for evaporator and **150 l/s** for the condenser.
- (b) The Chiller shall be equipped with semi-hermetic **two-stage centrifugal compressor** for better part load performance, water cooled condenser, flooded type cooler, expansion valve touch screen controller, and factory built-in VFD starter. It shall have efficiency of **not more than 0.55kW/TR** at full load and equipped with refrigerant type **R134a** (zero ozone depletion potential).
- (c) The Chiller’s Electrical Panel and Microprocessor Panel shall be of **IP42** rated; resistive against dust ingress. The power supply shall be of single in-come type and be capable of unloading up to **10%** of its full rated capacity without surging. The electrical power and control cable wiring shall be inclusive for complete and proper functional of the System.
- (d) The Chiller’s Power Consumption shall **not be greater than 400 kW**. It shall also be of less power consumption in the part load scenario as below: -
  - 1. Chiller Efficiency kW/TR at constant entering condenser fluid temperature (29.44°C) for the offered chiller shall be low and not more than the following loading points:
 

|             |              |              |              |
|-------------|--------------|--------------|--------------|
| 100% - 0.55 | 90% - 0.5397 | 80% - 0.5542 | 70% - 0.5622 |
|-------------|--------------|--------------|--------------|
- (e) The Contractor shall provide and submit Octave Band Sound Pressure Levels measured as per ARI standard 575. It shall outline data on test environment in which the measurements are made. It shall not be greater than 83dBA,
- (f) The **Heat Exchanger** shall be of double grooved tube sheet and design to provide superior leak tight joint.
- (g) The **Prime Movers** shall be of hermetically sealed motor of squirrel cage type with sufficient size to efficiently fulfil the compressor brake horsepower requirement, including gear drive losses. The starter for the electric motor shall be VSD/VFD for minimum electrical inrush.
- (h) The **Evaporator** shall be of multi-pipe flooded type with 35mm thick poly-foam insulation aluminium cladding sheet. The Evaporator shall not have a pressure drop of more than **120kPa** and the Condenser shall not have pressure drop of more than **70kPa** for better heat transfer.
- (i) The **Microprocessor Control Unit** shall be factory built-in and wired to affect system operation and control, protection, diagnostic tests. It shall complete with main processor, input and output modules, power supply unit, motor starter control module, relay board, temperature, and pressure sensors. The Control Panel shall include liquid crystal display touch on screen type, function keys, control button and alarm, and indicators. It shall be standalone system with provision to interface high level interface with BAS monitoring the overall system control and monitoring of multiple chiller units, chilled water pumps, and air cold condenser.

- (j) The **Chilled Water Pipe** shall be of black steel heavy grade and/or other approved equivalent, complete with minimum 40kg/m<sup>3</sup> Polyurethane Foam and G.I outer jacketing including necessary accessories and modification to connect the unit to existing piping.
- (k) The **Condensing Water Pipe** shall be of seamless galvanized steel to Schedule 40 heavy grade and/or other approved equivalent, complete with T-Joints, Elbow, Reducer, and Support Brackets including other necessary modification to connect the unit to existing piping.
- (l) The Microprocessor Control Centre shall perform but not limited to the following functions:
  1. Chiller Units Status Displayed
    - Entering and Leaving – Chilled water temperature
    - Condensing air temperature
    - Refrigerant temperature
    - Motor winding temperature
    - Evaporator pressure
    - Oil temperature and pressure
    - Motor ampere
    - Compressor motor starter status
    - Control set points
    - High-level interfacing capability with Lonmark certified protocol
  2. Schedule Operation and Control Set Points
    - Manual start-up and Shutdown
    - 365 days real time clock automatic schedule start-up and shutdown
    - Temperature control setpoint
  3. Diagnostic and Service Function
    - System prestart check on pressure, temperature, and control limits
    - Alarm history file review with date and time stamp
    - Alarm and an alert message
    - Handheld monitoring device with a minimum 8-inch display
  4. Safeties and Protection
    - Overcurrent
    - Over and Under Voltage
    - Single phasing failure
    - High oil temperature
    - Low evaporator refrigerant temperature
    - High condenser temperature
    - High motor compressor discharge pressure
    - Low oil pressure
    - Chilled water flow loss
    - Condenser air flow

## 20.2 PRIMARY CHILLED-WATER PUMP

- (a) The Contractor shall terminate, dismantle, and remove existing Chilled Water Pump and to supply with a brand-new Chilled-Water Pump unit of **Centrifugal, Single-Stage Vertical In-line split casing type**. It shall consist of spacer coupling, TEFC induction motor, mating flange, air release, grease lubricator, volute drain connection, base plate and any other necessary components to complete the system.
- (b) The Pump shall be selected for their particular applications in regards to water temperature and condition, suction head, static head, lift, and working pressure ensuring compatibility with the Chiller, Cooling Tower and existing Site Arrangement. It shall be capable of circulating not less than the nominal rate specified against the total system head resistance. The Tenderer is required to carry out the necessary calculation relating to the actual pressure drop of the equipment offered and at the actual system pipework.

- (c) The **Pump Efficiency** Level shall be of **IE3 class** and/or above with **efficiency of 88%** with the Continuous Motor rating to comply with BS5000. It shall be at **1500 RPM** and in compliance with the specified chiller plant efficiency (kW/ton).
- (d) The Pump shall be capable to circulate not less than the nominal rate specified against the total system head resistance. It is expected that the pump duty shall be 121 l/s @ 22m with Motor Efficiency to be 94.2% at certain point of the pump head. The Pump performance curves showing flow versus head characteristics, efficiency brake power, NPSH and with the predicted operating point shall be submitted by the Tenderer. **Nominal duties of pumps as given in BQ and specification shall be used as an approximate guide only and shall be determine by the Tenderer's engineer during site visit.**
- (e) The Pump Casing shall conform to quality standard and shall be carried out as per specification and detail given hereunder and shall follow the applicable on relevant ABCi / Building Standards.

The **Pump Casing** shall be constructed of a High grade, close-grain Cast Iron / Cast Steel complete with a tapped drained plug at the lowest point for draining / maintenance purposes. It shall also be equipped with copper piping for drain from each drain point of pump discharging to the nearest floor drain. The Pump shall also be able to withstand the pressure of the system, or minimum of 150 psi, whichever is greater.

- (f) The **Pump Impeller** shall be of 304 Stainless Steel, high-grade bronze or gunmetal, statically, and dynamically balanced in the factory. The reduction of the impeller diameter, if necessary, shall be carried out in the factory. Pump impeller diameter shall not exceed 0.9 of the maximum impeller diameter capability of the pump housing.
- (g) The **Pump Shaft** shall be of 420 Stainless Steel or any other approved equivalent. The item shall be sized to withstand the System's induced stresses. The Shaft shall be protected by renewable bronze or stainless-steel sleeves.
- (h) The **Pump Bearing**, unless sealed in bearing housing and protected from moisture and dust, shall be of sealed and lubricated for life type ball or roller bearings. All seal shall be of the mechanical seal type and should be of tungsten carbide surfaces or approved equivalent to suit pump manufacturer's requirement.
- (i) The **Pump Motor** shall be a 415V / 3-Phase / 50 Hz, of squirrel type cage, drop-proof induction motor continuously rated for the duty. It shall be directly coupled to the pump by means of a rubber-sheathed pin type flexible coupling, and fitted with a metal sheet guard. Motor Winding shall be insulated in accordance to BS2757 Class B and to suitably impregnated to withstand damp tropical conditions.
- (j) The Pump shall be installed on **Vibration Isolator** of spring plus/or neoprene in shear mounting to suit the degree of vibration isolation specified and the pump location. Not less than (4) mounting shall be provided for each pump/motor assembly. A sample of all selected vibration isolator c/w catalogue and selection data shall be submitted to the S.O for approval prior to installation.

The Mounting shall be selected and positioned so as to produce a uniform deflection of all mountings acting in the same place when the pump is operating and under all loads imposed by the pipework under operating conditions.

- (k) The **Chilled Water Pipe** shall be of black steel heavy grade and/or other approved equivalent, complete with minimum 40kg/m<sup>3</sup> Polyurethane Foam and G.I outer jacketing including necessary accessories and modification to connect the unit to existing piping.

### 20.3 COOLING TOWER

- (a) The Contractor shall terminate, dismantle, and remove existing Cooling Tower and to Supply with a brand-new Cooling Tower unit of **Super Low Noise Type Induced Draught Type, Cross-Flow/Counterflow Arrangement with Heat Rejection Capacity** based on the following condition unless otherwise specified and shall be suitable for the existing site arrangement.

|                               |   |                                 |
|-------------------------------|---|---------------------------------|
| ENTERING WATER TEMPERATURE    | : | 36°C                            |
| LEAVING WATER TEMPERATURE     | : | 30.6°C                          |
| AMBIENT TEMPERATURE           | : | 27.78°C                         |
| WATER FLOW RATE               | : | 522 m <sup>3</sup> /h (150 l/s) |
| HEAT REJECTION RATE           | : | 1070 HRT                        |
| FAN RPM                       | : | 1500 RPM                        |
| FAN MOTOR POWER SPECIFICATION | : | 415V / 3-Phase / 50 Hz          |

Supplier must provide letter of performance and CTI certificate for the proposed cooling towers.

The type and capacity of the cooling tower shall be as detailed in the schedule and/or as shown on the drawings. The cooling tower offered shall be from the list of vendors approved by DME.

- (b) The **Cooling Tower Casing** shall be of combustion resistant PVC or Fiberglass Reinforced Polyester (FRP). The Air Inlet Louvre shall be PVC with the water basin of FRP material. All steel structure shall be hot-dipped galvanized with stainless steel bolts and nuts as standard materials.
- (c) The **Cooling Tower Fan** shall be of heavy-duty cast aluminium alloy construction. It shall be statically and dynamically balance and tested in the factory to suits the above design speed. The Blade shall be of multiple-blade type made of hot-dipped galvanized steel or FRP construction with stainless steel shaft. The Guard shall be welded construction of heavy gauge steel, hot-dipped galvanized or FRP.
- 1) The Drive Arrangement of the fan shall be either: -
- Direct Drive with motor not exceeding 3 H.P.
  - Belt drive with total belt capacity not less than 1.5 times the rated H.P of the motor.
  - Heavy-duty gear drive.

For belt drive arrangement the fan shaft bearing shall be heavy-duty grease-lubricated ball bearing or roller bearing with moisture-proof seals.

- 2) The **Motor's fan** shall be of totally enclosed construction with extra moisture protection on windings and double-sealed permanently lubricated bearings/ Fan shall be belt drive. The Motor shall be mounted on deck of the tower outside the moist air stream for trouble-free operation.
- (d) The Cooling Tower **Filling** shall be of the wave formed sheet of Polyvinyl-Chloride (PVC) suitable for operation with inlet water temperature up to 45°C. Infill shall be easily removable from the side without dismantling the tower. The Fill material shall be fire-resistant.
- (e) The Cooling Tower **Drift eliminators** shall be designed to reduce drift losses to not more than 0.2% of circulated water.
- (f) The Cooling Tower **Make-up water valve** shall be solid bronze float valve with large diameter float located for easy access or access door provided for same.
- (g) It shall also be equipped with **Inspection door** to gain entry into the Tower to facilitate inspection and easy maintenance. Permanent access ladders and handrail shall be installed and of Hot-Dipped Galvanized Steel or approved equivalent materials with approval from the S.O.

- (h) The **Condensing Water Pipe** shall be of seamless galvanized steel to Schedule 40 heavy grade and/or other approved equivalent, complete with T-Joints, Elbow, Reducer, and Support Brackets including other necessary modification to connect the unit to existing piping.
- (i) Acceptable Noise Level shall be as indicated in the acoustic specification for the Cooling Tower.
- (j) The Tenderer shall supply and install all ancillary fitting including the make-up water supply piping, quick-fill, and bleed-off facilities, etc. s shown on the drawing.
- (k) The Cooling Tower shall be provided with a **water failure cut-off control** to stop refrigerant equipment should the level of water in the Cooling Tower Basin fall below the predetermined height. This Control shall have a manual reset and shall operate a pilot light on the control panel at the A/C Plant Room when water failure occurs. The Cooling Tower shall be arranged with a waterproof key switch mounted at a suitable position near the fan motor for maintenance purpose.
- (l) Should the Tower fail to perform after installation according to the approved performance curves, the Tenderer shall rectify and make good any defects or inadequacies and perform complete tower test at the site at no extra cost.

#### 20.4 WATER TREATMENT SYSTEM

##### 20.4.1 CHILLED WATER TREATMENT SYSTEM

###### a) CHEMICAL

- I. The Contractor shall supply corrosion and scale inhibitor to minimize the corrosion and the prevention of metal loss and corrosion by Product. The Corrosion and Scale Inhibitor shall be able to passivate multi-metal surface in the Chilled Water System and remain in the system protecting against future attack, thereby making a high-level corrosion control possible at an economical cost. The Inhibitor should also act as a dispersing and anti-depositing agent in order to control the precipitation of both suspended and dissolved solids in the System.
- II. The Inhibitor shall be based upon an aqueous solution of **Nitrite** and **Tolyl Triazole**, and/or approved equivalent.
- III. Non-foaming micro-biocide shall be added to the Chilled Water System to prevent microorganism growth like slime forming bacteria, anerobic sulfate-reducing bacteria and nitrate-reducing bacteria, which will cause fouled heat, transfer surface, restricting flow and contributing to under-deposit corrosion.

###### b) SURVEILLANCE TECHNICAL SERVICE FOR CHILLED WATER CIRCUIT

- I. The Contractor shall provide a consulting program, which shall include training of employer's maintenance personnel in the operation of the chemical treatment system.
- II. The Consulting Surveillance inspections check analysis procedure and water reports shall be the quarterly basis.
- III. The Field Surveillance technician shall review field test procedures and water control reports, recommend any modifications in a program necessary to improve the controlled environment, verification of procedures. Each Surveillance shall include the following parameters and test method: -

| Items | Parameters       | Frequency | Control Limit                  |
|-------|------------------|-----------|--------------------------------|
| 1.    | pH               | Monthly   | 9.0 – 11.0                     |
| 2.    | Total Hardness   | Monthly   | < 100 ppm as CaCO <sub>3</sub> |
| 3.    | Total Alkalinity | Quarterly | < 100 ppm as CaCO <sub>3</sub> |

| Items | Parameters    | Frequency | Control Limit                    |
|-------|---------------|-----------|----------------------------------|
| 4.    | Chlorides     | Quarterly | < 50 ppm as Cl                   |
| 5.    | Nitrate Level | Quarterly | > 1,200 ppm as NaNO <sub>3</sub> |
| 6.    | Conductivity  | Quarterly | < 3,000 µS/cm                    |
| 7.    | Total Iron    | Quarterly | < 3 ppm as Fe                    |

#### 20.4.2 CONDENSER WATER TREATMENT SYSTEM

##### a) CHEMICAL

Water Treatment Chemical for the cooling circuit shall prevent / control scale formation, corrosion, algae, bacteria, including Legionella bacteria and other living organisms. Chemical proposed in the treatment program must suitable with the cooling equipment and to comply with local health codes established by the authorities having jurisdiction. The following chemicals shall be furnished by Water Treatment Specialist:

##### I. Scale Control

The Scale is an adherent deposit laid down during operation, causing impaired heat transfer and restricting flow in the condenser circuit. A water treatment strategy is to adjust the condenser water to a slightly scaling condition and to use a scale inhibitor.

##### II. Corrosion Control

Factors contributing to the corrosiveness of cooling water are dissolved oxygen concentration, pH, calcium and alkalinity concentration, dissolved solid concentration, water temperature, and circulating-system metallurgy. Inhibitors like polyphosphates, molybdates, and/or approved equivalent. shall be used. In addition, **Tolytriazole**, and/or approved equivalent must be contained in the inhibitor for inhibiting the copper material. Corrosion shall be controlled to a rate of 5 MPY and 0.3 MPY for mild steel and copper respectively.

##### III. Biological Fouling

Algae can develop in the cooling tower where sunlight is present while slime can develop in almost any part of the System. These deposits can cause local corrosion as well as plugging and reduction of heat transfer. Biocides, and/or approved equivalent. shall be used to prevent the Growth of Microorganisms. The proposed biocide program must comply with at least two types of microbicides being fed alternately into the cooling system. The biocide program must able to control the bacteria, algae, SRB, fungi, planktonic as well as Legionella bacteria in the cooling system. Biocides proposed must be compatible with other treatment chemicals. Able to retaining its effectiveness across a broad spectrum of pH values in any water height in total dissolved or suspended solid, oil contamination or nitrogen-bearing compounds. All biocides shall be a non-oxidizing liquid type and any oxidizing biocide is strictly prohibited.

##### c) SURVEILLANCE TECHNICAL SERVICE FOR CHILLED WATER CIRCUIT

I. The Water Treatment Specialist shall provide a consulting program, which shall include training of employer's maintenance personnel in the operation of the chemical treatment system.

II. The Consulting Surveillance Inspection Check Analysis procedure and water reports shall be on monthly basis. The field surveillance technician shall review field test procedures and water control reports, inspect chemical feeding equipment, and recommend any modifications in a programme necessary to improve the controlled environment, verification of procedures.

III. Each Surveillance inspection and check-analysis procedure shall include the following parameters and test method: -

| Items | Parameters                | Frequency | Control Limit                  |
|-------|---------------------------|-----------|--------------------------------|
| 1.    | pH                        | Monthly   | 7.5 to 8.5                     |
| 2.    | Total Hardness            | Monthly   | < 300 ppm as CaCO <sub>3</sub> |
| 3.    | Total Alkalinity          | Quarterly | < 300 ppm as CaCO <sub>3</sub> |
| 4.    | Chlorides                 | Quarterly | < 120 ppm as Cl <sup>-</sup>   |
| 5.    | Inhibitor Level           | Monthly   | Vendor to Specify              |
| 6.    | Conductivity              | Monthly   | < 800 μS/cm                    |
| 7.    | Legionella Bacterial Test | ½ Yearly  | - note detected                |
| 8.    | Cycle of Concentration    | Monthly   | 5 to 7                         |

#### 20.4.3 CHEMICAL DOSING PUMP & CONTROL EQUIPMENT

a) The Contractor shall provide a complete **automatic dosage and conductivity control system** for controlling scale, corrosion, dissolved solids, and biological growth. This Controller continuously measures make-up water flow and samples the cooling water conductivity. This data, combined with user-defined set points, provide the controller with the information to control bleed-off, three chemical feed pump relays and bleed-off valve relay. The Equipment shall include all pipe works, fittings, valve, strainer etc.

b) The System shall provide the following:

##### 1. Conductivity Controller

It shall comprise:

- a. Microprocessor Base Control Unit
- b. Conductivity Probe:
  - Shall be compatible with the controller
  - Automatic Temperature Compensation
  - Reading Accuracy ± 1% full range
  - Range 0 to 1,999 microsiemen/cm (μS/cm)
  - Body made from PVC
  - Provide probe housing suitable for the probe
- c. Programmable set point for bleed-off

##### 2. Solenoid Bleed-Off Valve

- Bleed-off valve

##### 3. Metering Dosing Pump

It shall comprise:

- a. 3 Sets of Metering Pump with Polyethene Tubing
- b. Complete with injection check valve and foot valve
- c. The Power Supply that is compatible with the controller
- d. Meet IP65 protection standard
- e. Valves with double glass ball
- f. Box and liquid end in PP/PTFE diaphragm.

##### 4. Chemical Tank

It shall comprise:

- a. 3 Sets of Chemical Tank with Cover
- b. High-density Polyethylene material
- c. Able to contain 1-month chemical supply
- d. Chemicals, stress, and abrasion resistant.

**SCHEDULE 1 – TENDER FORM**

To:

**TENDER REFERENCE NO: KK/ /2025/ESTETRIPASH**

**INVITATION TO TENDER FOR REPLACEMENT OF WATER-COOLED CHILLER, COOLING TOWERS AND ASSOCIATED PARTS AT RAJA ISTERI PENGIRAN ANAK SALEHA HOSPITAL**

**TENDER OF (*name of tenderer*)**

Company/Business Registration No \_\_\_\_\_

Tender Closing Date: \_\_\_\_\_

| No.                                 | Description  | Unit      | Rate | Quantity | Amount |   |  |
|-------------------------------------|--|-----------|------|----------|--------|---|--|
|                                     |  |           |      |          | \$     | ¢ |  |
|                                     | <b>THE RATE QUOTED SHALL INCLUDE:</b>  |           |      |          |        |   |  |
| A                                   | Materials, consumables, labour, insurance, tools, equipment, transport, barrier, demolition works, mobilization, demobilization, heavy machineries, and others deemed necessary to carry out the works specified in the following description.   | INCLUSIVE |      |          |        |   |  |
| B                                   | Materials and consumables required in compliance to Infection Control Risk Assessment Implementation and Monitor Policy and PWD guidelines.  | INCLUSIVE |      |          |        |   |  |
| C                                   | All reinstatement and rectification work arise from the work.  | INCLUSIVE |      |          |        |   |  |
| 1.0                                 | <b><u>BILL NO. 1 – DISMANTLING WORKS</u></b><br><br>To supply manpower, tools, transport equipment, and miscellaneous equipment for the complete and safe dismantling work of the following items including removal of dismantled items to designated site as per OIC / S.O instruction. |           |      |          |        |   |  |
| 1.1                                 | Water-Cooled Chiller unit no. 1 c/w piping, wiring, bracket, and all other unserviceable equipment.  | No        |      | 1        |        |   |  |
| 1.2                                 | Primary Chilled Water pump no. 1 c/w piping, wiring, bracket, and all other unserviceable equipment.   | No        |      | 1        |        |   |  |
| 1.3                                 | Cooling tower c/w piping, wiring, bracket, and all other unserviceable equipment.  |           |      |          |        |   |  |
| 1.3.1                               | Cooling tower no. 1 at M&E Plant Room  | No        |      | 1        |        |   |  |
| 1.3.2                               | Cooling tower no. 2 at M&E Plant Room  | No        |      | 1        |        |   |  |
| 1.3.3                               | Cooling tower no. 3 at M&E Plant Room  | No        |      | 1        |        |   |  |
| <b>TOTAL AMOUNT CARRIED FORWARD</b> |  |           |      |          |        |   |  |

| No.                          | Description   | Unit | Rate | Quantity | Amount |   |
|------------------------------|---|------|------|----------|--------|---|
|                              |   |      |      |          | \$     | ¢ |
| 2.0                          | <b><u>BILL NO. 2 – BRAND NEW WATER-COOLED CHILLER</u></b>   |      |      |          |        |   |
| 2.1                          | To Supply, Install, Testing and Commissioning of a water-cooled chiller unit of <b>not less than 800TR</b> at <b>6.67°C/12.22°C</b> leaving and entering temperatures for evaporator and <b>29.44°C/34.61°C</b> leaving and entering temperatures for Condenser. The unit shall consist of <b>semi-hermetic two-stage centrifugal compressor</b> for better part load performance, water cooled condenser, flooded type cooler, expansion valve touch screen controller, and factory built-in VFD/VSD starter. The Unit's Efficiency shall be of <b>not more than 0.55kW/TR</b> at full load, and power consumption <b>not be greater than 400kW</b> and of single incomer type with capability to unload up to 10% of its full rated capacity without surging. The Unit shall be supplied fully refrigerant charged of <b>R134a</b> with zero ozone depletion potential.<br><br><i>Note: The Chiller shall fully comply to the specification specified in Section 2 and the Schedule 7. All piping and wiring necessary to connect the new equipment to the distribution board and piping headers shall be inclusive, but not limited to civil/structural works such as remediation works on the existing concrete plinth, ceiling brackets, and any other associated component.</i> | No.  |      | 1        |        |   |
| 2.2                          | <b><u>ASSOCIATED PARTS, ACCESSORIES AND FITTINGS – WATER-COOLED CHILLER</u></b><br>To Supply, Install, Testing, and Commissioning of <b>Flexible Connection</b> of relevant sizes and materials complete with all necessary fittings, gasket, nut-bolts, flanges, and other accessories to complete the system.<br><ul style="list-style-type: none"> <li>• <b>Condensing Water Pipe (Supply and Return Line) – 2 Nos.</b></li> <li>• <b>Chilled Water Pipe (Supply and Return Line) – 2 Nos.</b></li> </ul>  | No.  |      | 4        |        |   |
| 2.3                          | To Supply, Install, Testing, and Commissioning of Ductile Iron <b>Motorized Butterfly Valve</b> of relevant sizes and materials complete with all necessary fittings and accessories to complete the system.<br><ul style="list-style-type: none"> <li>• <b>Condensing Water Pipe (Return Line) – 1 No.</b></li> <li>• <b>Chilled Water Pipe (Return Line) – 1 No.</b></li> </ul>   | No.  |      | 2        |        |   |
| 2.4                          | To Supply, Install, Testing, and Commissioning of Ductile Iron <b>Butterfly Valve</b> of relevant sizes and materials complete with all necessary fittings and accessories to complete the system.<br><ul style="list-style-type: none"> <li>• <b>Condensing Water Pipe (Supply Line) – 1 No.</b></li> <li>• <b>Chilled Water Pipe (Supply Line) – 1 No.</b></li> </ul>   | No.  |      | 2        |        |   |
| TOTAL AMOUNT CARRIED FORWARD |   |      |      |          |        |   |

| No.                          | Description   | Unit | Rate | Quantity | Amount |   |
|------------------------------|---|------|------|----------|--------|---|
|                              |   |      |      |          | \$     | ¢ |
| 2.5                          | To Supply, Install, Testing, and Commissioning of Ductile Iron <b>Gate Valve</b> of relevant sizes and materials complete with all necessary fittings and accessories to complete the system.<br><ul style="list-style-type: none"> <li>• <b>Condensing Water Pipe (Return Line) – 1 No.</b></li> <li>• <b>Chilled Water Pipe (Return Line) – 1 No.</b></li> </ul>  | No.  |      | 2        |        |   |
| 2.6                          | To Supply, Install, Testing, and Commissioning of <b>Automatic Air Vent</b> of relevant sizes and materials complete with all necessary fittings and accessories to complete the system.  | No.  |      | 2        |        |   |
| 2.7                          | To Supply, Install, Testing, and Commissioning of Oil Filled SS <b>Pressure Gauge</b> of 100mm sizes and/or relevant sizes and materials complete with all necessary fittings, gauge cock, nut-bolts, gaskets, and other accessories to complete the system.<br><ul style="list-style-type: none"> <li>• <b>Condensing Water Pipe (Supply and Return Line) – 2 Nos.</b></li> <li>• <b>Chilled Water Pipe (Supply and Return Line) – 2 Nos.</b></li> </ul> | No.  |      | 4        |        |   |
| 2.8                          | To Supply, Install, Testing and Commissioning of <b>Temperature Gauge</b> of relevant sizes and materials, c/w all necessary fittings, gauge cock, nut-bolts, gaskets, and other accessories to complete the system.<br><ul style="list-style-type: none"> <li>• <b>Condensing Water Pipe (Supply and Return Line) – 2 Nos.</b></li> <li>• <b>Chilled Water Pipe (Supply and Return Line) – 2 Nos.</b></li> </ul>   | No.  |      | 4        |        |   |
| 2.9                          | To Supply, Install, Testing and Commissioning of <b>Flow switch</b> complete with new wiring, control, and other necessary fitting to complete the system.<br><ul style="list-style-type: none"> <li>• <b>Condensing Water Pipe (Return Line) – 1 No.</b></li> <li>• <b>Chilled Water Pipe (Supply Line) – 1 No.</b></li> </ul>   | No.  |      | 2        |        |   |
| 2.10                         | To Supply, Install, Testing and Commissioning of <b>Heat Calculator (BTU meter)</b> c/w match pair immersion temp sensor, RTD PT100, Modbus Connectivity, Thermowell including any other accessories to complete the System.  | Lot  |      | 1        |        |   |
| TOTAL AMOUNT CARRIED FORWARD |   |      |      |          |        |   |

| No.                          | Description   | Unit   | Rate | Quantity   | Amount           |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
|------------------------------|---|--|------|--|------------------|---|--|---------------------|---|--------------------------|-----|---|----------|------------------|---|---------|--------------------|---|-----|-----------------|---|---------|--------------------------|---|--|--|--|--|--|
|                              |   |  |      |  | \$               | ¢ |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| 2.11                         | To Supply, Install, Testing and Commissioning of <b>Electromagnetic Full-Bore Flowmeter</b> complete with all necessary components and accessories to complete the Work.<br>It shall have 0.4% accuracy @ 16.70 to 313 m3/h flow range, Elastomer lining material, 316SS electrode, flanged end, with remote mounted transmitter, LCD display, PN16, 10m sensor cable, 230 VAC, 50 Hz, IP67, c/w factory calibration certificate. 4-20mA and pulse signal output.   | Lot  |      | 1  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| 3.0                          | <b><u>BILL NO. 2 – BRAND NEW CHILLED WATER PUMP</u></b>   |  |      |  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| 3.1                          | To Supply, Install, Testing and Commissioning of a Primary Chilled Water Pump of <b>centrifugal, single-stage vertical in-line, split casing type unit</b> . The Unit shall consist of spacer coupling, TEFC induction motor, mating flange, air release, grease lubricator, volute drain connection, base plate, and any other necessary components to complete the system.  | No.  |      | 1  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
|                              | <table border="1"> <tr> <td>Motor Type</td> <td>:</td> <td>Centrifugal, Single-Stage Vertical In-Line, Split Casing Type Unit</td> </tr> <tr> <td>Motor Efficiency</td> <td>:</td> <td>&gt; 94.2% at Duty Point<br/>IE – 3 Classification</td> </tr> <tr> <td>Power Specification</td> <td>:</td> <td>415 V / 3- Phase / 50 Hz</td> </tr> <tr> <td>RPM</td> <td>:</td> <td>1500 RPM</td> </tr> <tr> <td>Design Flow Rate</td> <td>:</td> <td>121 l/s</td> </tr> <tr> <td>Total Dynamic Head</td> <td>:</td> <td>22m</td> </tr> <tr> <td>Pump Efficiency</td> <td>:</td> <td>&gt; 85.3%</td> </tr> <tr> <td>Casing/Impeller Material</td> <td>:</td> <td>Cast Iron/Steel<br/>Casing<br/>Stainless Steel<br/>Impeller</td> </tr> </table> | Motor Type   | :    | Centrifugal, Single-Stage Vertical In-Line, Split Casing Type Unit | Motor Efficiency | : | > 94.2% at Duty Point<br>IE – 3 Classification | Power Specification | : | 415 V / 3- Phase / 50 Hz | RPM | : | 1500 RPM | Design Flow Rate | : | 121 l/s | Total Dynamic Head | : | 22m | Pump Efficiency | : | > 85.3% | Casing/Impeller Material | : | Cast Iron/Steel<br>Casing<br>Stainless Steel<br>Impeller |  |  |  |  |
| Motor Type                   | :   | Centrifugal, Single-Stage Vertical In-Line, Split Casing Type Unit |      |  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| Motor Efficiency             | :   | > 94.2% at Duty Point<br>IE – 3 Classification                     |      |  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| Power Specification          | :   | 415 V / 3- Phase / 50 Hz   |      |  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| RPM                          | :   | 1500 RPM   |      |  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| Design Flow Rate             | :   | 121 l/s  |      |  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| Total Dynamic Head           | :   | 22m  |      |  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| Pump Efficiency              | :   | > 85.3%  |      |  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| Casing/Impeller Material     | :   | Cast Iron/Steel<br>Casing<br>Stainless Steel<br>Impeller           |      |  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
|                              | <i>Note: The Pump shall fully comply with the specification specified in Section 2. All piping and wiring necessary to connect the equipment to the distribution board and existing site arrangement shall be inclusive, but not limited to Civil/Structural works such as remediation works of the existing concrete plinth, brackets, and any other necessary components to complete the system.</i>  |  |      |  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| 3.2                          | <b><u>ASSOCIATED PARTS, ACCESSORIES AND FITTINGS – PRIMARY CHILLED WATER PUMP</u></b><br>To Supply, Install, Testing, and Commissioning of <b>Flow Switch Control</b> of relevant sizes and materials complete with all necessary fittings and accessories to complete the system.  | No.  |      | 1  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |
| TOTAL AMOUNT CARRIED FORWARD |   |  |      |  |                  |   |  |                     |   |                          |     |   |          |                  |   |         |                    |   |     |                 |   |         |                          |   |  |  |  |  |  |

| No.                          | Description  | Unit | Rate | Quantity | Amount |   |
|------------------------------|--|------|------|----------|--------|---|
|                              |  |      |      |          | \$     | ¢ |
| 3.3                          | To Supply, Install, Testing, and Commissioning of Ductile Iron <b>Butterfly Valve</b> for Inlet and Outlet Pipe of relevant sizes and materials complete with all necessary fittings and accessories to complete the system.   | No.  |      | 2        |        |   |
| 3.4                          | To Supply, Install, Testing, and Commissioning of Cast Iron <b>Y-Stainer</b> of relevant sizes and materials complete with all necessary fittings and accessories to complete the system.  | No.  |      | 1        |        |   |
| 3.5                          | To Supply, Install, Testing, and Commissioning of Oil Filled SS <b>Pressure Gauge</b> (0-200 psi) of 100mm sizes and/or relevant sizes and materials complete with all necessary fittings, gauge cock, nut-bolts, gaskets, and other accessories to complete the system. | No.  |      | 2        |        |   |
| 3.6                          | To Supply, Install, Testing and Commissioning of <b>Temperature Gauge</b> (0-50°C) of relevant sizes and materials, c/w all necessary fittings, gauge cock, nut-bolts, gaskets, and other accessories to complete the system.  | No.  |      | 2        |        |   |
| 3.7                          | To Supply, Install, Testing, and Commissioning of Cast Iron <b>Non-Return Valve / Check Valve</b> of relevant sizes and materials complete with all necessary fittings and accessories to complete the system.   | No.  |      | 1        |        |   |
| 3.8                          | To Supply, Install, Testing, and Commissioning of <b>Flexible Connection</b> of relevant sizes and materials complete with all necessary fittings and accessories to complete the system.  | No.  |      | 2        |        |   |
| TOTAL AMOUNT CARRIED FORWARD |  |      |      |          |        |   |

| Bil. No.                      | Keterangan<br>Description  | Unit Unit                       | Kadar Rate | Kuantiti Quantity | Jumlah Amount             |   |        |                     |   |         |                 |   |                                 |                     |   |          |         |   |          |                               |   |                        |    |  |   |  |  |
|-------------------------------|--|---------------------------------|------------|-------------------|---------------------------|---|--------|---------------------|---|---------|-----------------|---|---------------------------------|---------------------|---|----------|---------|---|----------|-------------------------------|---|------------------------|----|--|---|--|--|
|                               |  |                                 |            |                   | \$                        | ¢ |        |                     |   |         |                 |   |                                 |                     |   |          |         |   |          |                               |   |                        |    |  |   |  |  |
| 4.0                           | <b><u>BILL NO. 4 – COOLING TOWER no. 1, 2 and 3 at M&amp;E PLANT ROOM</u></b>  |                                 |            |                   |                           |   |        |                     |   |         |                 |   |                                 |                     |   |          |         |   |          |                               |   |                        |    |  |   |  |  |
| 4.1                           | <p>To Supply, Install, Testing and Commissioning of a <b>High-Efficiency type Cooling Tower of Super Low Noise Type Induced Draught Type, Cross-Flow/Counterflow Arrangement with Heat Rejection Capacity.</b></p> <p>The Cooling Tower shall be designed based on the following condition, unless otherwise specified, and shall be suitable for installation within the space indicated: -</p> <table border="1"> <tr> <td>ENTERING WATER TEMPERATURE</td> <td>:</td> <td>36°C</td> </tr> <tr> <td>LEAVING WATER TEMPERATURE</td> <td>:</td> <td>30.6°C</td> </tr> <tr> <td>AMBIENT TEMPERATURE</td> <td>:</td> <td>27.78°C</td> </tr> <tr> <td>WATER FLOW RATE</td> <td>:</td> <td>522 m<sup>3</sup>/h (150 l/s)</td> </tr> <tr> <td>HEAT REJECTION RATE</td> <td>:</td> <td>1070 HRT</td> </tr> <tr> <td>FAN RPM</td> <td>:</td> <td>1500 RPM</td> </tr> <tr> <td>FAN MOTOR POWER SPECIFICATION</td> <td>:</td> <td>415V / 3-Phase / 50 Hz</td> </tr> </table> <p>The Tenderer shall ensure that the cooling tower capacity meets the chiller requirements and make any necessary upgrades to achieve optimum system performance.</p> <p>The Tenderer shall submit a Letter of Performance and a CTI Certification for the proposed Cooling Tower.</p> <p>All associated components and accessories to complete and proper functional of the System shall be inclusive in the Quoted price, such as, motorized / non-motorized isolation valve, balancing valve, non-return valve, and flexible connection. It shall be in accordance with Manufacturer's recommendation and shall be of acceptable materials by the S.O.</p> <p><i>Note: The Cooling Tower shall fully comply with the specification specified in Section 2. All piping and wiring necessary to connect the equipment to the distribution board and existing site arrangement shall be inclusive, but not limited to Civil/Structural works such as remediation works of the existing concrete plinth, brackets, and any other necessary components to complete the system.</i></p> | ENTERING WATER TEMPERATURE      | :          | 36°C              | LEAVING WATER TEMPERATURE | : | 30.6°C | AMBIENT TEMPERATURE | : | 27.78°C | WATER FLOW RATE | : | 522 m <sup>3</sup> /h (150 l/s) | HEAT REJECTION RATE | : | 1070 HRT | FAN RPM | : | 1500 RPM | FAN MOTOR POWER SPECIFICATION | : | 415V / 3-Phase / 50 Hz | No |  | 3 |  |  |
| ENTERING WATER TEMPERATURE    | :  | 36°C                            |            |                   |                           |   |        |                     |   |         |                 |   |                                 |                     |   |          |         |   |          |                               |   |                        |    |  |   |  |  |
| LEAVING WATER TEMPERATURE     | :  | 30.6°C                          |            |                   |                           |   |        |                     |   |         |                 |   |                                 |                     |   |          |         |   |          |                               |   |                        |    |  |   |  |  |
| AMBIENT TEMPERATURE           | :  | 27.78°C                         |            |                   |                           |   |        |                     |   |         |                 |   |                                 |                     |   |          |         |   |          |                               |   |                        |    |  |   |  |  |
| WATER FLOW RATE               | :  | 522 m <sup>3</sup> /h (150 l/s) |            |                   |                           |   |        |                     |   |         |                 |   |                                 |                     |   |          |         |   |          |                               |   |                        |    |  |   |  |  |
| HEAT REJECTION RATE           | :  | 1070 HRT                        |            |                   |                           |   |        |                     |   |         |                 |   |                                 |                     |   |          |         |   |          |                               |   |                        |    |  |   |  |  |
| FAN RPM                       | :  | 1500 RPM                        |            |                   |                           |   |        |                     |   |         |                 |   |                                 |                     |   |          |         |   |          |                               |   |                        |    |  |   |  |  |
| FAN MOTOR POWER SPECIFICATION | :  | 415V / 3-Phase / 50 Hz          |            |                   |                           |   |        |                     |   |         |                 |   |                                 |                     |   |          |         |   |          |                               |   |                        |    |  |   |  |  |
| TOTAL AMOUNT CARRIED FORWARD  |  |                                 |            |                   |                           |   |        |                     |   |         |                 |   |                                 |                     |   |          |         |   |          |                               |   |                        |    |  |   |  |  |

| No.                          | Description   | Unit | Rate | Quantity | Amount |   |
|------------------------------|---|------|------|----------|--------|---|
|                              |   |      |      |          | \$     | ¢ |
| 5.0                          | <b><u>BILL NO. 5 - CHILLED WATER AND CONDENSER WATER TREATMENT SYSTEM</u></b><br><br><u>CHILLED WATER SYSTEM</u>  |      |      |          |        |   |
| 5.1                          | To Supply and Install of <b>Corrosion and Scale Inhibitor</b> as specified in Section 2, inclusive of all necessary component and accessories for fully functional of the System: -<br>a) Chemical for 1 year usage<br>b) Test kit and Lab test<br>c) Necessary Piping  | Lot  |      | 1        |        |   |
| 5.2                          | To Supply and Install of an <b>Automated Water Treatment System</b> complete with all necessary chemical, accessories and components as specified in Section 2 for fully functional of the System: -<br><br>a) Chemical pump (3 Nos.)<br>b) Chemical for 1 year usage<br>c) Storage Tanks<br>d) Test Kits and Lab Test<br>e) Necessary Piping<br><br>Condenser Water Report Analysis by an accredited testing laboratory.   | Lot  |      | 1        |        |   |
| 6.0                          | <b><u>BILL NO. 6 - MISCELLANEOUS WORKS</u></b>  |      |      |          |        |   |
| 6.1                          | To Prepare and apply of approved suitable Paint to new piping complete with direction arrow for the Chilled / Condensing Water Pipe, including affected existing pipe.  | Lot  |      | 1        |        |   |
| 6.2                          | To Demolish and extend existing and/or to Construct of new concrete plinth of M20 for the new Chiller, Pump and Cooling Towers.   | Lot  |      | 1        |        |   |
| 6.3                          | To supply and install aluminium-engraved, anti-corrosive tag identification (ID) and/or plates for water-cooled chiller, chilled water pump and cooling tower. Each tag shall clearly indicate the Commissioning Date, Purchase Order (P.O.) Number, Serial Number (where applicable), Model and Manufacturer, as well as any additional information required by the S.O.<br><br><i>Note: All tags shall be securely fastened, located in a visible and accessible position, and constructed to withstand environmental conditions.</i> | Lot  |      | 1        |        |   |
| TOTAL AMOUNT CARRIED FORWARD |   |      |      |          |        |   |

| Bil. No.                                | Keterangan<br>Description  | Unit<br>Unit | Kadar<br>Rate | Kuantiti<br>Quantity | Jumlah<br>Amount |   |
|---|--|--------------|---------------|----------------------|------------------|---|
|   |  |              |               |                      | \$               | ¢ |
| 7.0                                     | <b><u>BILL NO. 7 – TESTING AND COMISSIONING</u></b>  |              |               |                      |                  |   |
| 7.1                                     | The Contractor shall conduct test and commissioning of the following items, ensuring that the overall shall be balanced, troubleshoot, configured, in accordance to the Manufacturer's recommendation and existing site parameters. The Contractor shall prepare and submit report to Superintending Officer.  | Lot          |               | 1                    |                  |   |
| 7.2                                     | The Contractor shall provide chiller and water treatment specialist to provide on-site training to the Government's representatives on the operation, maintenance, and troubleshooting.  | Lot          |               | 1                    |                  |   |
| 7.3                                     | Chiller specialist from the original manufacture and water treatment specialist to provide onsite training to client representatives on operation, maintenance, troubleshooting. It shall include in supplying all training material etc. and specified in particular condition of contract and equipment specifications under manufacturer's field service.   | Lot          |               | 1                    |                  |   |
| 8.0                                     | <b><u>BILL NO. 8 – SUBMISSION OF DOCUMENTS</u></b>   |              |               |                      |                  |   |
| 8.1                                     | To provide a complete and thoroughly compiled report and/or others that includes comprehensive material list of all devices and accessories supplied and installed, all specification, testing and commissioning activities report, As-Built drawing (consisting of detailed system layout, piping layout and schematics, indicating the location and type of all devices installed and cabling routing), factory acceptance test report, catalogue, data sheets, relevant operating and maintenance manuals and/or others deemed necessary by the S.O.<br><br><i>Note: All documents shall be submitted as properly bound, hard-covered and/or equivalent hard copies, along with corresponding soft copies in PDF format, for the S.O.'s review and approval prior to project handover. Failure to provide accurate As-Built Drawings and relevant documentations will delay the release of final payment.</i> | Lot          |               | 1                    |                  |   |
| TOTAL AMOUNT FOR THIS SUMMARY OF TENDER |  |              |               |                      |                  |   |

**Note: Contractor shall check and ensure all prices quoted in the Tender Form are same including in words. If found to be not same, this Tender can be treated as invalid (Clause 3.1.4, Financial Regulation 2022).**

1. I/we, the undersigned having examined and fully understood the tender Documents, inspected and checked the site, offer to carry out and execute the above works in accordance with all relevant Standards Specification and Codes of Practice for the sum of Brunei Dollars.

**TOTAL AMOUNT (IN WORDS) IN BRUNEI DOLLARS: -**

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2. The completion period of this tender shall be **EIGHT (8) MONTHS** from the Effective Date.
3. We offer and undertake on your acceptance of our Tender to provide the above-mentioned services in accordance with your Invitation To Tender.
4. I/we confirm that my/our tender has been calculated on a firm price basis and that I/we have taken into account all aspects, site conditions and other matter that may affect the works. I/we understand that I/we not be allowed any claims for payment may arise out of my/our misunderstanding, and/or misinterpretation and/or miscalculation of the works and/or site conditions.
5. I/we understand and agree that the Government has the option to accept part of my/our tender and I/we agree and confirm that in such case, there shall be no adjustment of my/our tender prices and/or rates.
6. Unless and until a formal agreement is prepared and executed, this tender offer together with your Letter of Acceptance thereof shall constitute a legal and binding contract between us.
7. Our Tender is fully consistent with and does not contradict or derogate from anything in your Invitation to Tender. We have not qualified or changed any of the provisions of your Invitation to Tender.
8. Our offer is valid for **six (6)** calendar months from the tender closing date and when requested by you, we shall extend the validity of this offer.

Dated this                      day of                      2025

\_\_\_\_\_  
**Signature of authorised officer of Tenderer**

Name:

Designation:

Tenderer's official stamp:

## **SCHEDULE 2 – INFORMATION SUMMARY**

2.1 Tenderers shall provide in this Schedule the following information:

- a. Management summary
- b. Company profile (including Contractor and sub-contractor(s), if any)
- c. Years of experience (as of the Tender Closing Date) of the Contractor and sub-contractor(s) in the:
  - *Replacement of water-cooled chiller, pump, cooling tower and maintenance services of the mentioned item.*
- d. Other information which is considered relevant

**SCHEDULE 3 – SUB-CONTRACTS**

- 3.1 Tenderers shall complete Table 3.1 with information about all the companies involved in the provision of the services and items specified in this tender. This shall include details about the Contractor and each sub-contractor involved, as well as their respective responsibilities.
- 3.2 Tenderers shall also indicate in Table 3.1 any alliance relationship established with each sub-contractor. An alliance is defined as a formal and binding business relationship between the allied parties.

Table 3.1 - Responsibility Table

| Company Name      | Responsibility Description | Alliance Relationship between Contractor and Sub-contractor(s) |                  |                      |
|-------------------|----------------------------|--|------------------|----------------------|
|                   |                            | Alliance Exists? (Y/N)   | Date Established | Alliance Description |
| Contractor        |                            |  |                  |                      |
|                   |                            | Not Applicable   | Not Applicable   | Not Applicable       |
| Sub-contractor(s) |                            |  |                  |                      |
|                   |                            |  |                  |                      |

#### **SCHEDULE 4 – COMPANY’S BACKGROUND**

- 4.1 Each of the companies involved in this tender, including Contractor and sub-contractor(s) (if any), shall provide information on the company’s background, scope of operations, financial standing and certified copy of its Certificate of Incorporation or Certificate of Registration (as the case may be).

## SCHEDULE 5 – REFERENCES

5.1 Tenderers shall submit a list of customers in Table 5.1 to whom the Contractor has provided similar services and items as specified in this tender in the recent 3 years as of the Tender Closing Date.

Table 5.1 - References of previous customers

| Customer Name and Address | Customer Type (Govt or Quasi Govt)* | Contact Person | Title | Contact Number, Fax Number and E-mail Address |
|---------------------------|-------------------------------------|----------------|-------|---|
|                           |                                     |                |       |   |

**\*Note: Tenderers shall indicate whether the customer is a Government or Quasi Government organisation. A Quasi Government is defined as an organisation which (1) is managed and controlled by the Government; or (2) has at least 50% shares being held by the Government. Please leave the column blank if the customer is neither a Government or Quasi Government organisation.**

5.2 The Ministry of Health shall treat all the information submitted under this schedule in strict confidence.

5.3 The Ministry of Health reserves the right to contact the references for tender assessment purposes.

**SCHEDULE 6**

**PENGAKUAN PENENDER  
*TENDERER'S DECLARATION***

**SCHEDULE 7 – EQUIPMENT SPECIFICATION**

**1) CHILLER CHECKLIST**

| <b>CHECKLIST TO BE FILLED IN BY TENDERER</b>   |  |            |           |
|--|--|------------|-----------|
| THE TENDERER MUST DISCLOSE ANY DISCREPANCY OR NON-COMPLIANCE TO THE TENDER SPECIFICATION |  |            |           |
| <b>No.</b>   | <b>Description</b>   | <b>Yes</b> | <b>No</b> |
| 1  | Whether the minimum capacity requirement of 800TR at 6.7°C/12.2°C leaving and entering temperatures for cooler and 29.44°C/34.61°C entering and leaving temperature for condenser with minimum flow rate of 121 l/s for evaporator and 150 l/s for the condenser.  |            |           |
| 2  | Whether factory built-in VFD/VSD starter for the Chiller.  |            |           |
| 2.1  | VSD must carry warranty of 2 years after the DLP period ends.  |            |           |
| 3  | Efficiency shall not more than 0.55kW/TR at full load  |            |           |
| 4  | Whether the offered chiller is operating with eco-friendly refrigerant R134a with zero ODP   |            |           |
| 5  | Whether chiller is AHRI/ANSHAE/ANSI/ABCI certified   |            |           |
| 6  | Whether selection of the chiller has been carried out based fouling factor as per AHRI conditions.   |            |           |
| 7  | Whether the compressor is two-stage centrifugal  |            |           |
| 8  | Whether the power consumption of the Chiller are not exceeding the existing MCCB rate of 440kW at full load capacity.  |            |           |
| 9  | Offered chiller shall be able to work down to 10% of it rated full load capacity.  |            |           |
| 10   | Whether the cooler pressure drop is restricted to a maximum of 120kPa to accommodate within the available pump head.   |            |           |
| 11   | Whether the condenser pressure drop is restricted to a maximum of 70kPa to accommodate within the available pump head.   |            |           |
| 12   | Whether the cooler and condenser connections shall similar to the existing one to make the piping easy and suit to site.   |            |           |
| 13   | Touch screen controller offered.   |            |           |
| 14   | Whether OEM testing for the chiller after commissioning with the chiller manufacturer proprietary software is included or not.   |            |           |
| 15   | Whether software selection for the chiller is attached herewith.   |            |           |
| 16   | Whether the Chiller has flooded multi pipe type cooler for more efficient operation of the system.   |            |           |
| 17   | Whether the Chiller has compact design and smaller footprint.  |            |           |
| 18   | Whether Chiller is complete with remote service and connectivity that allow remote monitoring and data analysis through wireless technologies, providing ongoing insight to the Chiller's health.  |            |           |
| 19   | The size of the Chiller must fit within the space available in the plant room.   |            |           |
| 20   | Daily routine checks by the tender and Monthly full report by the Equipment authorized specialist.   |            |           |
| 21   | Has the Tenderer submitted a letter of undertaking confirming compliance with the technical specifications, warranty obligations, and provision of field services? It is mandatory that this letter to be issued by the Chiller's manufacturer, the principal (not the dealer) and submitted as part of the tender submission. |            |           |

**2) PRIMARY CHILLED WATER PUMP CHECKLIST**

| DESCRIPTION   | OFFERED              |
|---|----------------------|
| PRIMARY CHILLED WATER PUMP NO. 1                                  | VERTICAL INLINE TYPE |
| Manufacturer  |                      |
| Brand   |                      |
| Origin  |                      |
| Model   |                      |
| Duty Flow Rate (l/s)  |                      |
| Total head in ft of water gauge                                   |                      |
| Inlet / Outlet Connection   |                      |
| Maximum Working Pressure  |                      |
| Pump Efficiency at a given point                                  |                      |
| Motor Rating and Efficiency Class<br>V/Ph/Hz<br>RPM<br>Efficiency |                      |
| Mechanical Seal Material  |                      |
| Impeller Material   |                      |

### 3) COOLING TOWER CHECKLIST

| DESCRIPTION  | OFFERED |
|--|---------|
| COOLING TOWER NO. 1  |         |
| Manufacturer   |         |
| Brand  |         |
| Origin   |         |
| Model  |         |
| Total Heat Rejection capacity at the given condition   |         |
| Flow Rate in kW and TR   |         |
| Total Power Input in kW  |         |
| Cooling Rating as per (CTI) Certification and to be attached herewith  |         |
| Motor Rating and Efficiency Class<br>V/Ph/Hz<br>RPM<br>Efficiency  |         |
| Cooling Tower Fan (size in mm / nos.)<br>Material must be aluminium  |         |
| Inlet and Outlet Connection  |         |
| PVC infill basin   |         |
| Material of basin  |         |
| The material of nut and bolt   |         |
| Required Pump Head in ft of water gauge  |         |
| Evaporator loss % of the rated flow rate   |         |
| Drift loss % of the rated flow rate  |         |
| Makeup water flow in l/s   |         |
| Overall size (tenderer to ensure new cooling tower fits within the available size at the site and left enough service space) |         |
| The Sound level in dBA (From 2 meters)   |         |
| Dry Weight   |         |

#### 4) WATER TREATMENT SYSTEM

| DESCRIPTION   | OFFERED |
|---|---------|
| CONDENSER WATER TREATMENT   |         |
| Local Supplier Detail   |         |
| Specialist Name<br>Qualification<br>Experiences                           |         |
| Dosing Pump Brand   |         |
| Flow rate maximum pressure  |         |
| Conductivity Controller Brand, TDS range and Sensor type                  |         |
| Corrosion inhibitor chemical brand and Approval by MOH/MOD to be attached |         |
| Bio and Backup bio chemical brand and Approval by MOH/MOD to be attached  |         |
| Water sample testing laboratory details                                   |         |

**SCHEDULE 8**  
**LIST OF PERSONNEL**

| <b>HVAC ENGINEER</b> |   |  |
|----------------------|---|--|
| Name                 | : |  |
| I/C No & Colour      | : |  |
| Date of Issue        | : |  |
| Valid Until          | : |  |
| <b>QUALIFICATION</b> |   |  |
|                      |   |  |
|                      |   |  |
|                      |   |  |
|                      |   |  |
|                      |   |  |
|                      |   |  |
|                      |   |  |
|                      |   |  |
| <b>EXPERIENCE</b>    |   |  |
|                      |   |  |
|                      |   |  |
|                      |   |  |
|                      |   |  |
|                      |   |  |
|                      |   |  |
|                      |   |  |

**FOREMAN / SUPERVISOR**

Name

:

I/C No &amp; Colour

:

Date of Issue

:

Valid Until

:

**QUALIFICATION****EXPERIENCE**

**TECHNICIAN**

Name

:

I/C No &amp; Colour

:

Date of Issue

:

Valid Until

:

**QUALIFICATION****EXPERIENCE**

**TRADESMAN / ELECTRICIAN**

Name

:

I/C No &amp; Colour

:

Date of Issue

:

Valid Until

:

**QUALIFICATION****EXPERIENCE**

**SAFETY OFFICER**

Name

:

I/C No &amp; Colour

:

Date of Issue

:

Valid Until

:

**QUALIFICATION****EXPERIENCE**

## SCHEDULE 9

### SUBMITTAL AND DOCUMENTATION

| No. | Description  | Remark   |
|-----|--|----------|
| 1   | System Design and Performance Documentation:<br>1. Brochure / Catalogue<br>2. Performance Chart<br>3. Letter of Undertaking  | Yes / No |
| 2   | 1. Civil & Structural assessment report.<br>2. Mechanical & Electrical assessment report.  | Yes / No |
| 3   | Work Program and Phase-specific risk assessment report.<br>1. Programme Schedule – detailed bar chart work programme and critical path network<br>2. Shutdown justification and contingency plan<br>3. Risk Assessment.<br>4. Any other relevant information | Yes / No |
| 4   | List of Personnel.   | Yes / No |
| 5   | Composite Shop Drawing.  | Yes / No |
| 6   | Compiled Final Report  | Yes / No |

**CONTRACT**

BETWEEN

**THE GOVERNMENT OF HIS MAJESTY THE SULTAN  
AND YANG DI-PERTUAN OF BRUNEI DARUSSALAM  
REPRESENTED BY  
MINISTRY OF HEALTH**

and

[ ]

for

**REPLACEMENT OF WATER-COOLED CHILLER, COOLING TOWER AND  
ASSOCIATED PARTS AT RAJA ISTERI PENGIRAN ANAK SALEHA HOSPITAL  
REF:**



commissioning of the System is to take place;

- 1.1.7 “Delivery” means when the delivery of the System to the Installation Site has been made successfully installed;
- 1.1.8 “Government Requirements” means:
- a) the specifications issued by the Government to the Contractor for the purpose of inviting the Contractor to submit its tender for the Project as annexed hereto in **Schedule D**;
  - b) other amendments and specifications as may be mutually agreed in writing between the Parties;
- 1.1.9 “Hardware” where the context requires, means any parts, components and accessories that are associated to the System;
- 1.1.10 “Installation Date” means the date referred to in **Clause 9.15**;
- 1.1.11 “Installation Site” means the M&E Plant Room, Raja Isteri Pengiran Anak Saleha Hospital;
- 1.1.12 “Installation Tests” refer to the tests to be conducted in accordance with **Clause 9.12** to **Clause 9.16**;
- 1.1.13 “Invitation to Tender” means the Invitation to Tender including the documents thereto issued by the Government for the purpose of inviting bids from prospective contractors for this Project;
- 1.1.14 “Normal Working Hours” means the hours between 7.45am and 4.30pm each working day;
- 1.1.15 “Project” means all the Hardware and Services to be provided by the Contractor for the supply, delivery, installation, testing, training and warranty of the Hardware and Services under this Contract;
- 1.1.16 “Services” means all the services which the Contractor is required to perform under this Contract;
- 1.1.17 “Sub-Contractor” means any person, firm or company (other than the Contractor) to whom is sub-contracted any part of the Project;
- 1.1.18 “System” means the Chiller and Cooling Tower System.
- 1.2 References herein to Clauses and Schedules are to clauses in and schedules to this Agreement.
- 1.3 The Schedules to this Contract shall be deemed to form part of this Contract.
- 1.4 The headings to the Clauses and Schedules are inserted for ease of reference only and shall not affect the interpretation and construction of this Contract.
- 1.5 Unless the context requires otherwise, words importing the singular include the plural and vice versa, words importing gender include every gender and words denoting persons shall include a natural person, company, firm, unincorporated association or any other legal entity whether acting as trustee or not.
- 1.6 Any reference to a working day shall mean a reference to any day other than a Friday and Sunday or a public holiday in Brunei Darussalam and any reference to a month or year shall mean a month or year reckoned according to the Gregorian calendar.

1.7 Any reference to a party in the Contract includes a reference to his successors and permitted assigns.

1.8 Reference to any statute or statutory provision includes a reference to that statute or statutory provision as from time to time amended, extended or re-enacted.

## **2 SCOPE OF PROJECT**

2.1 The Contractor agrees as prime contractors to carry out the Services and supply to the Government the System which meets the Government Requirements in accordance with and subject to the terms of this Contract.

2.2 but without limiting the generality of **Clause 2.1**, the Contractor shall with due care and diligence:

2.2.1 comply with the technical specifications and compliances as set out in the Government Requirements to be delivered or completed by the Contractor;

2.2.2 supply, install, integrate and commission the System;

2.2.3 where necessary, carry out site preparation for the System in accordance with the Government Requirements to be delivered or completed by the Contractor;

2.2.4 deliver the Hardware and Services to ensure that all parts of the System are fully operational at the Installation Site in accordance with this Contract;

2.2.5 deliver and install the System at the Installation Site;

2.2.6 carry out the Acceptance Test of the System in accordance with **Clause 9**;

2.2.7 sell the Hardware to the Government free from encumbrances;

2.2.8 assist the Government during the period of the Acceptance Tests in accordance with **Clause 9**;

2.2.9 commission the System by the Commissioning Date;

2.2.10 provide all other Services stated in this Contract; and do all things which are necessary or reasonably to be inferred from this Contract.

2.3 The Contractor acknowledges that it has been supplied with sufficient information about the Government Requirements and that it has made all appropriate enquiries to enable it to undertake the Project in accordance with the Contract. The Contractor shall neither be entitled to any additional payment nor excused from any obligation or liability under this Contract because of any misrepresentation by the Contractor of any fact relating to the functions, facilities and capabilities of the System or any part of it as specified in the Government Requirements. The Contractor shall promptly bring the attention of the Government Representative any matter which is not adequately specified or defined in the Government Requirements and any other relevant specification or document.

2.4 The Contract may employ Sub-Contractors for carrying out any part of the Project subject to the Government's prior written approval (which shall not be unreasonably withheld or delayed). The Contractor shall not be relieved of any of its obligations under this Contract by entering into any sub-contract for the performance of any part of the Project, and shall at all times remain primarily responsible and liable to the Government for the conduct of the Sub-Contractors.

2.5 The Contractor undertakes to carry out the Project with reasonable care and skill using appropriately qualified and experienced persons.

### **3 GOVERNMENT'S RESPONSIBILITIES**

- 3.1 The Government undertakes to provide the Contractor promptly with any information which the Contractor may reasonably require from time to time to enable the Contractor to proceed expeditiously with the performance of this Contract.
- 3.2 The Government shall provide the following facilities to authorized personnel of the Contractor and its Sub-Contractors throughout the Government's Normal Working Hours and at such other times as the Government authorizes after reasonable prior notice from the Contractor (such authorization not to be unreasonably withheld or delayed):
- 3.2.1 access to and use of the System;
  - 3.2.2 access to the Government's employees and the Installation Site;
  - 3.2.3 all electric power, lighting reasonably needed by the Contractor to perform the Project (and the Contractor warrants that it has informed the Government of all such needs so far as reasonably practicable prior to the date of signature of this Contract).

### **4 PAYMENT PROVISIONS**

- 4.1 Subject to the provisions of this Contract, the Government shall pay to the Contractor the Contract Price in the manner prescribed in **Schedule B**.
- 4.2 The Contractor shall submit such invoices or other documents as the Government may require for the purposes of making payment.
- 4.3 The Government shall not pay for expenses or cost of whatever nature other than those expressly set forth in this Contract.
- 4.4 The Contract Price for the Project is firm and fixed and shall not be subject to any increase except those increases expressly agreed by the Government in writing in accordance with this Contract.
- 4.5 The Contractor shall on request promptly supply the Government with all information needed to check the calculation of prices and shall in particular indicate all unit prices requested by the Government.

### **5 SITE PREPARATION**

- 5.1 The Contractor shall supply to the Government in reasonable time before their scheduled delivery events, such information and assistance as may be reasonably necessary to enable the Government to prepare the Installation Site for the installation of the System and to provide proper environmental and operational conditions for the efficient working and maintenance of the System and for this purpose the Contractor will, if necessary, make available to the Government free of charge the advice of a suitably qualified engineer or technician. The Government shall at its own expense prepare the Installation Site and provide such environmental and operational conditions prior to delivery.

### **6 DELIVERY**

- 6.1 The Contractor shall schedule the delivery and installation events to meet the Commissioning Date.
- 6.2 Without prejudice to the generality of **Clause 6.1** above, the Contractor shall make its own arrangements regarding import and export licenses, storage, insurance, custom and import duties and all matters connected with transportation of the Hardware from their points of origins to the Installation Site.

- 6.3 The Contractor shall be responsible for all costs incurred by the Contractor in providing any special equipment, personnel or works reasonably necessary to deliver the Hardware to the Installation Site.

## **7 DELAYS AND LIQUIDATED DAMAGES**

- 7.1 Time is of the essence of this Contract. The Contractors shall use all reasonable endeavors to achieve completion of the Project.
- 7.2 Subject to **Clause 17 (Force Majeure)**, in the event the Contractor is unable to perform the Services to the satisfaction of the Government or fails to perform the Services within the time specified by the Government for reasons other than the willful default, omission or negligence of the Government, its employee, agent or other contractors appointed by the Government, The Government may by prior notice to the Contractor, impose Liquidated Damages at the daily rate of 15% of the Contract Price divided by the Contract Period (in Days). Maximum cumulative amount to be imposed is at ten percent (10%) of the contract price. Should delays persists before or after reaching the maximum cumulative amount, the Government may exercise its rights under the Contract, which may include but are not limited to termination and pursuit of further remedies.
- 7.3 If the Contractor fails to pay the said damages, the Government may deduct the amount due from any monies due or which may become due from the Government to the Contractor under this Contract and other contracts between the Parties or recover the same as a debt due from the Contractor.
- 7.4 If the progress of the Project is delayed for reasons not attributable to the Contractor, the Government Representative may, upon the application by the Contractor, grant such extensions of time as the Government deems reasonable. The Contractor shall not be entitled to claim any additional expenses incurred for such extensions of time.

## **8 INSTALLATION**

- 8.1 The Contractor shall install the Hardware at the Installation Site on the date specified in the Project Plan.
- 8.2 If in the reasonable opinion of the Contractor it is necessary to remove or otherwise disconnect any of the Government's existing equipment at the Installation Site in order to carry out the installation of the Hardware, the Contractor shall give the Government sufficient advance written notice of this, then the Government shall permit, and obtain all necessary consents for, such removal and/or disconnection and shall give the Contractor all necessary assistance to enable such work to be carried out.
- 8.3 The Contractor shall provide all tools and equipment which are necessary for the installation of the Hardware.

## **9 ACCEPTANCE TESTS**

### Conducting Acceptance Tests

- 9.1 Acceptance Tests on the entire System including the Hardware shall be conducted to verify and demonstrate that the System meets the Government Requirements. The Acceptance Tests shall be conducted after installation of the Hardware.
- 9.2 The Contractor shall give to the Government in writing **seven (7) days** prior written notice or such shorter notice as the Government Representative may agree in writing of the date when the Contractor will be ready to commence any Acceptance Tests.
- 9.3 The Contractor shall provide all tools and testing equipment for the purposes of the Acceptance Tests.

- 9.4 After the Contractor has provided notice, in accordance with **Clause 9.3**, of the commencement of the Acceptance Tests and requested Government personnel are not available for the tests, the Contractor may proceed to conduct the Acceptance Tests as if such personnel were present.
- 9.5 Upon completion of any Acceptance Test by the Contractor, the Contractor shall give notice of such completion to the Government together with the test results.
- 9.6 If the Government are satisfied that the Acceptance Test has been successfully completed, the Government shall certify that the Acceptance Test has been successfully completed.
- 9.7 If the Government is not satisfied that the Acceptance Tests has been successfully completed, the Government shall, within a period of **seven (7) days** of receipt of the notice, provide in writing a defect report.
- 9.8 If the Government does not, within a period of **seven (7) days**, provide in writing a defect report, then the Acceptance Test shall be deemed to be satisfactorily completed.

#### Delay in Acceptance Tests

- 9.9 If in the opinion of the Government, the Acceptance Tests are unreasonably delayed, the Government may by notice in writing require the Contractor to conduct the tests within **seven (7) days** from receipt of such notice and the Contractor shall make the tests on such date or dates within the said **seven (7) days** as the Contractor may fix and of which the Contractor shall give reasonable notice to the Government.
- 9.10 If the Contractor fails to conduct such tests within the time specified, the Government may itself proceed to conduct the said tests. All Acceptance Tests so conducted by the Government shall be at the risk and expense of the Contractor.
- 9.11 The Contractor shall conduct the Installation Tests after installing the Hardware. In the Installation Tests, the Contractor shall submit the Hardware to all the test procedures set out in the Government Requirements, if any, to ensure that the Hardware and every part thereof is in full working order. The Contractor shall give advance written notice to the Government of the date of the Installation Tests in accordance with **Clause 9.3** above and the Government shall have the right to attend the Installation Test on the said date.
- 9.12 The Government shall provide all reasonable facilities to enable the Installation tests to be carried out.
- 9.13 In the event the Contractor is unable to certify that the entire Hardware has successfully passed the Installation Tests or does not so certify within **fourteen (14) days** from the date when the Installation Tests were first conducted, the Hardware will be deemed to have failed the Installation Tests.
- 9.14 If the Hardware or any part thereof fail to pass the Installation Tests then the Government may, by written notice to the Contractor elect at its sole option:
- 9.14.1 to have the Installation Tests repeated (without prejudice to its other rights and remedies) on the same terms and conditions within a reasonable time. Unless otherwise agreed in writing between the Parties, all such repeat Installation Tests shall not be construed as any grant of extension of time by the Government and the Contractor remains liable for any delay in complying with its obligations under the Contract; or
- 9.14.2 to require (without prejudice to its other rights and remedies) the Contractor to provide such replacement equipment as will enable the Hardware to pass the Installation Tests. Unless otherwise agreed in writing between the Parties, all provision of such replacement equipment shall not be construed as any grant of extension of time by the Government and the Contractor remains liable for any delay in complying with its

obligations under the Contract; or

9.14.3 to accept the Hardware subject to an abatement of the Contract Price such abatement to be such amount, as taking into account the circumstances, is reasonable. In the absence of written agreement as to abatement within fourteen (14) days after the date of such notice the Government shall be entitled to exercise the option in **Clause 9.15.4** below.;

9.14.4 To treat the Contractor as being in breach of Contract and to reject the Hardware as not being in conformity with the Contract in which event the Government shall be entitled to terminate this Contract (without prejudice to the Government's other rights and remedies) in accordance with **Clause 15**.

9.15 When the Hardware has successfully passed the Installation Tests, the Contractor shall so certify to the Government in writing that the Hardware is operating in accordance with the manufacturer's published specifications and the Government requirements. The date of such certification shall be the Installation Date.

#### Failure of Acceptance Tests

9.16 The Government shall not be under any obligation to accept the System if it does not successfully pass any of the Acceptance Tests under the Contract. The Contractor shall submit a report to the Government detailing the cause for the failure of any Acceptance Tests and the corrective action taken.

#### Commissioning Date

9.17 As soon as the System has successfully passed all the Acceptance Tests, the Government shall forthwith issue a certificate commissioning the System and the date of the certificate shall be the Commissioning Date of the System.

## **10 WARRANTIES**

10.1 The Contractor warrants and undertakes:

10.1.1 that it is not aware as at the date of this Contract of anything within its reasonable control which might or shall adversely affect its ability to perform its obligations under this Contract;

10.1.2 the import, supply and installation of the Hardware, and any part of it shall not infringe any laws of any country;

10.1.3 that as at the date of signature of this Contract:

10.1.3.1 the System shall be suitable to fulfil the Government Requirements and that the System shall perform and function in accordance with the Government Requirements and the performance standards;

10.1.3.2 the installation of the System shall be free from defects in workmanship;

10.1.3.3 the Hardware shall be of new manufacture (i.e. not second hand, re-conditioned or used items), merchantable quality and fit for the purpose for which such equipment is purchased;

10.2 For the avoidance of doubt, the Government's rights and remedies under this **Clause 10** are independent of; and without prejudice to any other rights and remedies of the Government.

## **11 INDEMNITY AND LIABILITY**

11.1 The Contractor shall indemnify the Government for any personal injury or death caused by the

negligence of its employees in connection with the performance of its duties and obligations under this Contract, or by defects in any Hardware, the System or Services supplied pursuant to this Contract.

11.2 The Contractor shall indemnify the Government for direct damage to tangible property caused by the negligence of its employees in connection with the performance of their duties and obligations under this Contract.

11.3 The Contractor agrees that its liability under this Contract whether for recovery or any sums due or for any obligation liability or duty arising hereunder shall be joint and several and any demand made of the Contractor shall be deemed to be a demand made to all the parties comprised in the Contractor. Any release or discharge by a party comprised in the Contractor shall not release or discharge the Contractor under this Contract nor shall it prejudice or affect the Government's rights and remedies against the Contractor.

## **12 INTELLECTUAL PROPERTY RIGHTS INDEMNITY**

12.1 The Contractor shall indemnify the Government and keep the Government fully and effectively indemnified against all costs, claims, demands, expenses and liabilities of whatsoever nature incurred by the Government to the extent the System as used in accordance with the Government Requirements infringes the intellectual property rights (including without limitation any patent, copyright, registered design, design right or trademark) of any third party in respect of the Hardware, subject to the following conditions:

12.1.1 the Government shall promptly notify the Contractor in writing of any allegations of infringement of which it has notice and will not make any admission without the Contractor's prior written consent nor take any step which would prejudice the Contractor's defence of the claim;

12.1.2 the Government, at the Contractor's request and expense, shall allow the Contractor (subject to **Clause 12.1.3** below) to conduct and/or settle all negotiations and litigation resulting from such claim;

12.1.3 the conduct by the Contractor of any such negotiations or litigation shall be conditional upon the Contractor:

12.1.3.1 giving to the Government such reasonable security as shall from time to time be required by the Government to cover the amount ascertained or agreed or estimated, as the case may be, of any compensation, damages, expenses and costs for which the Government may be liable; and

12.1.3.2 taking over such conduct within a reasonable time after being notified of the claim in question;

12.1.4 the Government shall, at the request of the Contractor, afford all reasonable assistance with such negotiations or litigation, and shall be reimbursed by the Contractor for any reasonable out of pocket expenses incurred in so doing.

12.2 The indemnity given under **Clause 12.1** above will not apply to infringement arising out of the use of the System or any part thereof in combination with any equipment and computer program not supplied or approved by the Contractor for use with the System or by reason of any modification or alteration made to the System other than by the Contractor or with the Contractor's prior written consent.

12.3 If the Government's normal use or possession of the System is held by a competent tribunal to constitute an infringement of a third party's intellectual property rights or if the Contractor is advised by legal counsel that such use or possession is likely to constitute such an infringement then the Contractor shall promptly and at its own expense:

12.3.1 procure for the Government the right to continue using and possessing the System; or

12.3.2 modify or replace the System (without detracting from its overall performance) or as to avoid the infringement (in which event the Contractor shall compensate the Government for the amount of any direct loss and/or damage sustained or incurred by the Government by reason of such modification or replacement); or

12.3.3 if the provisions in **Clauses 12.3.1** and **12.3.2** above cannot be accomplished on reasonable terms, remove the System and refund the Contract Price to the Government.

### **13 CONFIDENTIALITY**

13.1 The Contractor hereby acknowledges that it may be furnished with or may otherwise receive or have access to information regarding administrative, management, financial or marketing activities of the Government on a confidential basis.

13.2 All such information mentioned in **Clause 13.1**, including any materials or documents containing such information, are proprietary and confidential to the Government ("Proprietary Information").

13.3 The Contractor shall preserve and protect the confidentiality of the Proprietary Information and all physical and electronic forms thereof, whether disclosed to the Contractor before or after this Contract is signed. The Contractor shall not disclose or distribute or cause to be disclosed or distributed the Proprietary Information to any third party and shall not use or cause to be used the Proprietary Information for its own benefit or for the benefit of any third party except in the proper cause of this Contract or as authorized by law.

13.4 The obligations under this **Clause 13** shall not apply to any information which the Contractor can establish to have publicly known without breach of this Contract by the Contractor.

13.5 The Contractor shall upon expiration or termination of this Contract or immediately upon the Government's request, return to the Government all documents and other tangibles, including any form of storage media (and all copies and reproductions of any of the foregoing) which contain Proprietary Information and which may be in the Contractor's possession or under its control.

13.6 The provisions of this **Clause 13** shall survive the expiration or termination of this Contract.

13.7 The Contractor and any other employees and agents of the Contractor tasked with assisting and advising the Contractor in relation to this Contract shall, if so required by the Government, sign an Undertaking to Safeguard Official Information in the form prescribed in **Schedule E**.

### **14 GIFTS**

14.1 The Government shall be entitled to terminate this Contract and recover from the Contractor the amount of any loss resulting from such termination, if the Contractor shall have offered or given or agreed to give to any person any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any action in relation to the obtaining or execution for this Contract with the Government, or for showing or forbearing to show favour or disfavour to any person in relation to this Contract or any other Contract with the Government or the like acts shall have been done by any person employed by the Contractor or acting on its behalf (with or without the knowledge the Contractor). Or if, in relation to this Contract or any other Agreement with the Government, the Contractor or any person employed by the Contractor or acting on its behalf shall have committed or abetted in the commission of an offence under the **Prevention of Corruption Act (Cap. 131 of the Laws of Brunei)** or **sections 161, 162, 163, 164 and 165** or **sections 213, 214 and 215 of the Penal Code (Cap. 22 of the Laws of Brunei)**.

## 15. TERMINATION

15.1 Either Party may terminate this Contract by written notice:

15.1.1 if the other commits a material breach of this Contract (and in the case of a breach capable of remedy fails to remedy it within **thirty (30) days** of receipt of a written notice from the Party not in default specifying the breach and containing a warning of an intention to terminate if breach is not remedied); or

15.1.2 pursuant to **Clause 16** in the circumstances mentioned therein.

15.2 The Government may terminate this Contract with immediate effect by written notice to the Contractor:

15.2.1 where the Contractor is an individual, or where the Contractor is a firm any partner in that firm, shall at any time become bankrupt, or shall have a receiving order or administration order made against him, or shall make any compositions or arrangement with or for the benefit of his creditors; or

15.2.2 by the Government if the Contractor being a company shall pass a resolution or the Court shall make an order that the company shall be wound up (otherwise than for the purpose of amalgamation or reconstruction), or if a receiver or manager on behalf of a creditor shall be appointed, or if circumstances arise which entitle the Court or creditor to appoint a receiver or manager or which entitle the Court to make a winding up order or if the Contractor ceases or threatens to cease to carry on business; or

15.2.3 by the Government if the Contractor shall have a receiver or administrative or judicial manager appointed of it or over any part of its undertaking or assets; or

15.2.4 in the circumstances mentioned in **Clause 7, 9, 14 and 28**.

15.3 If the Government engages another person to carry out any remaining work under this Contract after termination under **Clauses 15.1 and 15.2**, any additional cost incurred by the Government shall be paid by the Contractor.

15.4 The Government shall also have the right to terminate this Contract for convenience by giving **thirty (30) days'** notice in writing and without having to assign any reason for doing so, and the Contractor shall have no claim for any damages or compensation, except that if the Contractor is owed money for Services rendered prior to the date of termination. The Contractor shall provide the Government with a final invoice specifying the Services rendered, and the Government shall pay such amount within **thirty (30) days** upon receipt of the original invoice and support and expenses shall be reasonably and properly incurred and mitigated by the Contractor (as validated by a reputable and a mutually selected accountant) for Services prior to the date of such termination as preparation for the performance of the Contractor's obligations under this Contract. The exercise of this right shall not be subject to challenges in any tribunal on the ground of insufficiency of reason for termination.

15.5 Any termination of this Contract (however occasioned) shall not affect any accrued rights or liabilities of either Party nor shall it affect the coming into force or the continuance in force of any of the provision hereof which is expressly or by implication intended to come into force or continue in force on or after such termination.

## 16. FORCE MAJEURE

16.1 Neither Party shall be liable for any delay in performing or failure to perform any of its obligations under this Contract, caused by events beyond its reasonable control ("Force Majeure Event") including but not limited to:

16.1.1 acts of God;

- 16.1.2 war, hostilities, riot, insurrection or civil commotion, malicious damages, blockages, strikes, lockouts and industrial disputes affecting such performance; and
- 16.1.3 flood, fire, rainstorms and other natural physical disasters, outbreak of diseases, plaque or other epidemics.
- 16.2 The Party claiming the Force Majeure Event shall promptly notify the other in writing of the reasons for the delay or stoppage (and the likely duration) and shall take all reasonable steps to overcome the delay or stoppage. However, any delay or failure by any sub-contractor to perform its obligations shall not relieve the Contractor from liability for such delay or failure except where the delay or failure is also beyond the reasonable control of the sub-contractor.
- 16.3 If the Party claiming the Force Majeure Event has complied with **Clause 19.2** its performance under this Contract shall be suspended for the period that the Force Majeure Event continues and the Party shall have an extension of time for performance which is reasonable and in any event equal to the period of delay or stoppage. As regards such delay or stoppage:
- 16.3.1 any costs arising from the delay or stoppage shall be borne by the Party incurring those costs;
- 16.3.2 either Party may, if the delay or stoppage continues for more than **thirty (30)** continuous days, terminate this Contract with immediate effect on giving written notice to the other and neither Party shall be liable to the other such termination.
- 16.4 A statement in writing by a competent authoritative independent body such as the local Chamber of Commerce, confirming the veracity of a Force Majeure event claimed by either Party shall be accepted as conclusive evidence thereof.

## 17 NOTICES

- 17.1 Any notice, demand or other communication given or made by one Party to the other under this Contract shall be in writing and delivered by hand or sent by registered post or facsimile transmission or electronic mail to the address and number as specified below (or such address or facsimile number or electronic mail address as the addressee has by **three (3) days** prior written notice specified to the other Party):
- To the Government:
- To: the Contractor:
- 17.2 Such notice or document shall be deemed to be duly served:
- 17.2.1 if delivered by hand during the normal business hours of the addressee to the addressee's address – at the time of delivery;
- 17.2.2 if sent by registered post during the normal business hours of the addressee – on the seventh (7<sup>th</sup>) working day after posting;
- 17.2.3 if sent by facsimile transmission during the normal business hours of the addressee – at the time of successful transmission;
- 17.2.4 if sent by electronic mail during the normal business hours of the addressee – at the time of successful transmission.
- 17.3 A notice shall be deemed to be effective from the time of service or on the notice's effective date, whichever is the later.

## **18 SAFETY AND SECURITY**

- 18.1 The Contractor shall throughout the progress of the Project take full responsibility for the security of the Installation Site, and the safety of all persons entitled to be on the Installation Site, and shall keep the Installation Site in an orderly state appropriate to the avoidance of danger to all persons entitled to be on the Installation Site, the public and adjoining parts of the Installation Site and, in particular, shall provide and maintain at its own cost all guards, fencing, barriers and warning signs and watch when and where necessary or as required by the Government or by any competent authority for the protection of the Project and for the safety and convenience of the public.
- 18.2 The Contractor shall comply with, and shall procure compliance by its sub-contractors, employees and agents and by others on the Installation Site, with its duties and obligations under any Acts, codes of practice, regulations and all other requirements having the force of law relating to the health, safety and conduct of operations for the Project.
- 18.3 The Contractor shall at all reasonable times keep upon the Installation Site a competent person in charge and any instructions given to him by the Government or its agent shall be deemed to have been issued to the Contractor.
- 18.4 The Contractor shall ensure that all its personnel are issued with proof of identity in relation to their work on the Project.

## **19 INDEMNITY**

- 19.1 The Contractor shall indemnify and keep the Government fully and effectively indemnified against all loss or damage to any property or injury or death of any person or liability suffered and legal fees, costs and expenses incurred by the Government arising out of any claims against the Government resulting from any act, neglect, omission or default of the Contractor, in the performance of its duties and obligations under this Contract.

## **20 ENTRY AND INSPECTION**

- 20.1 The Government, its authorized agents or servants may at all reasonable times enter upon the Installation Site to view the progress of the Project.

## **21 CLEARANCE OF INSTALLATION SITE**

- 21.1 On the completion of the Project, the Contractor shall clear away and remove from the Installation Site all machinery, surplus material, rubbish and temporary works of every kind and leave the whole of the Installation Site clean and in a workmanlike condition to the satisfaction of the Government. The Contractor shall make good at its own cost any damage to the Installation Site or any part thereof including the walls, doors or partitions caused by the Contractor.

## **22 WAIVER**

- 22.1 No delay by either Party to exercise any of its power, rights or remedies under this Contract shall operate as a waiver hereof, nor shall any single or partial exercise of the same preclude any further exercise thereof or the exercise of any other powers, right or remedy. Without limiting the foregoing, no waiver by any Party of any breach of any provision hereof shall be deemed to be a waiver of any subsequent breach of that of any other provision hereof. Any waiver by any Party must be in writing and signed by such Party to be effective.

## **23 SEVERABILITY**

- 23.1 In the event that any term or provision or part of a term or provisions of this Contract shall be held or determined invalid, unlawful or unenforceable to any extent such term or provision or part of a term or provision shall be deemed severed from the remaining terms and provisions

of this Contract and the remaining terms and conditions of this Contract shall continue to be valid and enforceable to the fullest extent permitted by Law.

## **24 ENTIRE CONTRACT**

24.1 This Contract is the complete and exclusive statement of the Contract between the Parties relating to the subject matter of this Contract and supersedes all previous communications, representations and other arrangements, written or oral.

## **25 AMENDMENTS AND VARIATIONS**

25.1 No amendment or variation to this Contract shall be effective unless in writing and signed by both Parties and their duly authorized representatives.

## **26 TAXES AND DUTIES**

26.1 The Contractor shall be entirely liable and responsible for all taxes, duties, licence fees and/or levies imposed or payable for in respect of the Contract or in connection with any transaction(s) forming the subject matter of the Contract, whether occurring or imposed within or outside Brunei Darussalam.

## **27 ASSIGNMENT AND SUBCONTRACT**

27.1 The Contractor shall not, without the prior written consent of the Government, assign or transfer this Contract or the benefits or obligations or any part thereof to any other person, including any right to assign, either absolutely or by way of charge, any monies due or to become due to it, or which may become payable to it under this Contract. The Contractor shall be responsible for the acts, defaults, neglects or omissions of any assignee or Subcontractor, their agents, servants or workmen as fully as if they were the acts defaults, neglects or omissions of the Contractor, its agents, servants or workmen.

27.2 The Contractor shall within **ten (10) working days** from the date of signing of this Contract furnish the Government with the names and identity cards or passport numbers of its Sub-Contractors.

## **28 COLLUSION**

28.1 The Government shall be entitled to terminate this Contract and recover from the Contractor the amount of any loss resulting from such termination, if the Contractor is found to be in breach of the Tenderer's Declaration Form signed by the Contractor as set out in **Schedule J**.

## **29 GOVERNING LAW AND DISPUTE RESOLUTION**

29.1 This Contract shall be construed in accordance with and governed by the laws of Brunei Darussalam.

29.2 The Parties shall make every effort to amicably resolve, by direct informal negotiation, any dispute arising between them pursuant to or in connection with this Contract.

29.3 If the Parties are unable to amicably resolve any dispute within **thirty (30) days** from the date when such dispute arose, either Party shall require that the dispute be referred for resolution by arbitration in accordance with the provisions of the **Arbitration Order, 2009**.

29.4 The Arbitration Tribunal shall consist of a single arbitrator, such person to be agreed between the parties, or failing agreement, to be nominated in accordance with the **Arbitration Order, 2009**. The applicable rules of arbitration shall be the UNCITRAL Rules of Arbitration.

29.5 The seat and place of arbitration shall be Brunei Darussalam and the language of arbitration shall be English.

- 29.6 All rights and obligations of the Parties under this Agreement shall continue in full force and effect pending the final outcome of such arbitration.
- 29.7 Any reference to arbitration under this clause shall be a submission to arbitration within the meaning of the **Arbitration Order, 2009** for the time being in force in Brunei Darussalam.
- 29.8 The application of **Part II of the International Arbitration Order, 2009** and the Model Law referred thereto, to this Agreement is hereby excluded.

**IN WITNESS WHEREOF** this Agreement has been executed by the authorised representatives of the Parties as of the day and year first above written.

**For and on behalf of  
THE GOVERNMENT OF HIS MAJESTY  
THE SULTAN AND YANG DI-PERTUAN  
OF BRUNEI DARUSSALAM  
Represented By  
THE MINISTRY OF HEALTH**

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**In the presence of**

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**For and on behalf of**

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**In the presence of**

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